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ABSTRACT

This collection of data resulted from a survey conducted by the Engineers Joint Council for the National Science Foundation in 1969. The sample consisted of 86,438 names taken from a list of approximately 350,000 names of members of engineering societies. After statistical adjustments, the survey sample of 44,837 qualified respondents represented a total survey population of 308,000 individual engineers meeting Engineers Joint Council criteria. (This does not represent a sample of all engineers in the United States.) The questionnaire and specialties list used are reproduced as an appendix. The data are grouped in the following categories: level of highest degree, age, sex, product or service area, bachelor's degree curricula groups, function, type of employer, area of technology, highest degree curricula groups, and geographic location. (TS)

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AMERICAN ENGINEERING MAN

STATISTICS FROM THE 1969 NATIONAL ENGINEERS R

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Statistics from the 1969 National Engineers Register

Based on a Survey Conducted by

ENGINEERS JOINT COUNCIL
345 East 47th Street
New York, N.Y. 10017

Under a Contract with the

NATIONAL SCIENCE FOUNDATION

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Source of Data for the 1969 National Engineers Register Study

NOTE: THE FIGURES IN THIS REPORT DO NOT REPRESENT THE TOTAL NUMBER OF ENGINEERS IN THE UNITED STATES. THEY REPRESENT ONLY THE POPULATION OF ENGINEERING SOCIETY MEMBERS SURVEYED, AS DESCRIBED BELOW.

The National Engineers Register was maintained by Engineers Joint Council from 1964 to 1969 under a contract with the National Science Foundation as part of the National Register of Scientific and Technical Personnel. Major surveys were conducted in 1964, 1967, and 1969. In the 1969 survey EJC was responsible for mailing, collecting, and screening the questionnaires, while NSF provided the statistical procedures, data processing, and tabulation reproduced herein.

The unified mailing list developed by Engineers Joint Council was the primary source of names and addresses. By using this list, which is essentially a combination of engineering society membership lists from which duplicate names have been largely eliminated, NER avoided the tedious procedure of merging samples of names drawn separately from the individual societies in order to identify duplications and establish statistical and mailing controls. Weighting factors computed from earlier studies of multiple membership patterns and variations in the response rate among different societies were applied to give a statistical picture of the entire population being sampled.

The basic sample was drawn by programming the computer to select every fourth name of the 315,205 names on the EJC unified mailing list. This was augmented by a separate sample from the 30,271 names on the American Institute of Aeronautics and Astronautics (AIAA) mailing list not included in the unified list. Questionnaires were mailed to the resulting sample of 86,438 names.

Questionnaires and lists of selected engineering specialities, which had been updated on the basis of experience with the 1964 and 1967 surveys, were mailed by EJC in June to the survey sample. A second mailing was made in August to all those who had not responded by that time. 54,556 responses, not all of which were usable, were received from these two mailings. The basic response rate was therefore about 63%.

The responses were screened by EJC to separate the returns from individuals who did not meet the criteria established for inclusion as engineers, as described below. The need for applying such criteria stemmed from the fact that most engineering societies include among their members many non-engineers, such as scientists and business executives who are involved in related technical fields. For purposes of the 1969 survey, anyone with an engineering degree or holding state registration as a professional engineer was included, even if he indicated that he considered himself a non-engineer. In addition, anyone holding professional-level membership in a society which provides for the acceptance of demonstrated professional competence in lieu of a formal engineering degree, and who regarded himself as an engineer, was also included. This non-engineering degree group consisted mainly of people having degrees in physics, chemistry, or other fields of science plus some with less than a bachelor's degree in terms of formal education but with substantial engineering experience. Non-U.S. citizens were counted if they were working in the United States but excluded if they were residing abroad.

Returns not meeting the criteria for inclusion as engineers, 9,719 in number, were from people who had not been educated as engineers and did not consider themselves engineers, foreign nationals living outside the U.S., deceased persons, duplicates, and those who had omitted key information required for statistical analysis. The remaining questionnaires were carefully screened by EJC for completeness and returned to the respondent for clarification where necessary. Information on the forms was coded by EJC and keypunched by NSF onto cards for computer data processing.

Usable responses were statistically adjusted by NSF to represent an unduplicated number of individual engineers in the participating societies. The statistical procedures took into consideration such factors as effective response rates for each society and the multiple memberships held in these societies. Based upon these procedures, weighting factors were developed for 18 societies separately. The resulting statistical adjustments enabled the 44,837 qualified respondents to represent a total survey population of 308,000 individual engineers meeting EJC criteria and to represent each of the characteristics reported.

The data tables in this publication consist of detailed tabulations and cross-tabulations of the estimated population of 308,000 qualified engineers represented by the survey sample and, in the case of Part II, an estimated population of 37,500 who did not meet the criteria for inclusion as engineers. Note that the numbers in this report do not represent the total United States engineering population. (See warning at beginning of this section.) Because of the membership qualifications of the professional societies, the engineers responding to the survey represent a more qualified, more experienced, and more professionally oriented group than the total engineering population.

Those engineers who do not hold membership in a national professional engineering society are outside the scope of this survey. Since a selected portion of the total engineering population was sampled, the absolute numbers for any variable should not be considered as national totals. Percentage relationships developed from the survey, however, are considered to be representative for the members of engineering societies. The procedures used do not permit estimation of population totals in terms of the individual variables.

The questionnaire and specialties list used for the 1969 National Engineers Register survey are reproduced in the Appendix and should be referred to for help in interpreting the data in this report. No instructions or explanations were given to survey respondents other than those in the questionnaire and specialties list. Each respondent selected the terms that best described himself. Neither EJC nor NSF are able to provide more specific definitions or interpretations of terms used in the survey. The questionnaire included several sections for which data were not computed by NSF, consequently EJC is unable to provide data on characteristics that are not included in the tables in this report.

Highlights of the 1969 National Engineers Register survey were published in <u>A Profile of the Engineering Profession</u>, March 1971, which may be obtained from Engineers Joint Council Department P, 345 East 47th Street, New York, New York 10017 for $1.00 per copy prepaid.

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GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969

CHARACTERISTICS	NUMBER	PERCENT
ENGINEERS REPORTING	308,000	100
MEN	306,900	100
WOMEN	1,100	---
EMPLOYMENT STATUS		
FULL-TIME PROFESSIONALLY EMPLOYED	289,100	94
PART-TIME PROFESSIONALLY EMPLOYED	4,500	1
UNEMPLOYED AND SEEKING EMPLOYMENT	2,000	1
NOT EMPLOYED AND NOT SEEKING EMPLOYMENT	1,900	1
RETIRED	8,900	3
NO REPORT	1,600	---
STUDENT STATUS		
FULL-TIME STUDENT	2,900	1
PART-TIME STUDENT	11,700	4
NO REPORT	293,400	95
TYPE OF EMPLOYER		
PRIVATE INDUSTRY OR BUSINESS	211,100	68
SELF-EMPLOYED	11,400	4
COLLEGE OR UNIVERSITY	20,200	6
JUNIOR COLLEGE OR TECHNICAL INSTITUTE	900	---
SECONDARY, ELEMENTARY OR OTHER SCHOOL	300	---
NONPROFIT ORGANIZATION, OTHER THAN A SCHOOL	5,400	2
FEDERAL GOVERNMENT-CIVILIAN EMPLOYEE	24,600	8
USPHS, MILITARY SERVICE-ACTIVE DUTY	4,900	2
STATE GOVERNMENT	5,900	2
LOCAL GOVERNMENT	4,800	2
OTHER	4,600	1
NOT EMPLOYED	12,800	4
NO REPORT	1,200	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT FUNCTION		
ADVISING, CONSULTATION	30,800	10
CONSTRUCTION, INSTALLATION	10,300	3
COORDINATION, LIAISON	7,700	2
COST ESTIMATING, BUDGETING, PROCUREMENT, PURCHASING	5,100	2
DESIGN	51,600	17
DEVELOPMENT	25,500	8
DRAFTING, DRAWING, GRAPHICS	500	---
EXPLORATION	2,100	1
INFORMATION AND DATA PROCESSING, OR TECHNICAL WRITING	3,400	1
PLANNING, DIRECTING	57,600	19
PRODUCTION, OPERATIONS, MAINTENANCE	20,500	7
QUALITY ASSURANCE AND CONTROL, RELIABILITY	4,700	2
RESEARCH	22,000	7
SALES, TECHNICAL SERVICES	18,900	6
SPECIFYING	1,500	---
TEACHING, INSTRUCTING, TRAINING	14,700	5
TESTING, EVALUATION, INSPECTION	6,800	2
OTHER	6,200	2
NO REPORT	17,900	6
EMPLOYMENT SUPERVISORY RESPONSIBILITY		
NO REGULAR SUPERVISION GIVEN	52,200	17
INDIRECT OR STAFF SUPERVISION	50,400	16
SUPERVISION OF TEAM OR UNIT	33,900	11
SUPERVISION OF PROJECT OR SECTION	61,700	20
MANAGEMENT OF MAJOR DEPARTMENT, DIVISION, OR PROGRAM	56,900	18
GENERAL MANAGEMENT OF ORGANIZATION	28,800	9
NO REPORT	24,000	8
YEARS OF PROFESSIONAL EXPERIENCE		
1 YEAR OR LESS	4,000	1
2-4	23,000	7
5-9	46,800	15
10-14	49,300	16
15-19	51,800	17
20-24	43,700	14
25-29	26,300	8
30-34	21,300	7
35-39	11,400	4
40 OR MORE	13,700	4
NO REPORT	16,800	5
HIGHEST DEGREE		
DOCTORATE	24,500	8
PROFESSIONAL MEDICAL	100	---
PROFESSIONAL ENGINEERING	13,200	4
MASTER'S	71,100	23
BACHELOR'S	185,300	60
ASSOCIATE	300	---
LESS THAN ASSOCIATE	9,100	3
FOREIGN DEGREE, LEVEL UNKNOWN	400	---
NO REPORT	4,000	1

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
AGE (MEDIAN AGE 42)		
24 OR UNDER	5,000	2
25-29	31,400	10
30-34	43,500	14
35-39	44,300	14
40-44	50,400	16
45-49	48,900	16
50-54	31,300	10
55-59	21,400	7
60-64	14,700	5
65-69	7,600	2
70 AND OVER	6,600	2
NO REPORT	2,800	1
PROFESSIONAL IDENTIFICATION		
ENGINEER	254,700	83
ARCHITECT	400	---
PHYSICIST	1,200	---
CHEMIST	1,000	---
GEOLOGIST	2,600	1
MATHEMATICAN	300	---
METALLURGIST	7,400	2
TECHNICIAN	600	---
OTHER	30,900	10
NO REPORT	8,800	3
EMPLOYMENT AREA OF TECHNOLOGY		
BIOMEDICAL GROUP	1,600	---
AQUACULTURE	------	---
BIOCHEMISTRY	100	---
BIOENGINEERING	600	---
BIOLOGICAL APPLICATIONS	100	---
BIOMECHANICS	100	---
BIONICS, MEDICAL ELECTRONICS	100	---
HEALTH PHYSICS	------	---
INDUSTRIAL HEALTH	100	---
LIFE SUPPORT	100	---
MEDICAL APPLICATIONS	200	---
PHYSIOLOGY	------	---
PUBLIC HEALTH	200	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
BEHAVIORAL AND SOCIAL GROUP	4,100	1
ECONOMICS	1,800	---
EDUCATIONAL TECHNOLOGY	1,900	1
HISTORY (TECHNOLOGICAL)	100	---
HUMAN FACTORS	300	---
PSYCHOLOGY	------	---
CHEMICAL AND MATERIALS GROUP	11,700	4
CHEMICAL APPLICATIONS	4,500	1
COMBUSTION, FUELS	1,000	---
COATING, PLATING, CLADDING	400	---
CORROSION	400	---
CRYSTALS, CRYSTALLOGRAPHY	100	---
ELECTROCHEMISTRY	300	---
FILAMENT TECHNOLOGY	100	---
FUEL CELLS	100	---
MATERIAL APPLICATIONS	3,500	1
MATERIAL PROPERTIES	1,300	---
THERMOCHEMISTRY	100	---
METALLURGICAL GROUP	12,100	4
BENEFICIATION, ORE PROCESSING	600	---
CASTING	400	---
METALLURGY (GENERAL)	3,900	1
METALLURGY, EXTRACTIVE	1,100	---
METALLURGY, PHYSICAL	2,900	1
METALLURGY, POWDER	400	---
METALLURGY, PROCESS	2,200	1
WELDING	600	---
EARTH, ATMOSPHERIC AND MARINE GROUP	9,900	3
ATMOSPHERIC SCIENCES, METEOROLOGY	100	---
DESALTING	100	---
EARTH SCIENCES	900	---
GEOCHEMISTRY	100	---
GEODESY	100	---
GEOLOGY	2,400	1
GEOPHYSICS	300	---
HYDROGRAPHY	------	---
HYDROLOGY	1,000	---
MARINE SCIENCES	800	---
MINING, SURFACE	1,200	---
MINING, UNDERGROUND	1,600	---
MINING, UNDERWATER	------	---
OCEANOGRAPHY	200	---
OFFSHORE OPERATIONS	600	---
UNDERWATER TECHNOLOGY	200	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
ENVIRONMENTAL AND STRUCTURAL GROUP	33,700	11
AIR POLLUTION	900	---
CONCRETE TECHNOLOGY	1,300	---
CONSERVATION, RECLAMATION	700	---
DRAINAGE, IRRIGATION	900	---
ENVIRONMENTAL CONTROL	3,300	1
ENVIRONMENTAL FACTORS	300	---
NOISE REDUCTION	200	---
PHOTOGRAMMETRY	100	---
POLLUTION	300	---
PUBLIC SAFETY	200	---
ROCK MECHANICS	200	---
SANITARY ENGINEERING	2,800	1
SOILS	1,500	---
SOLID WASTE	100	---
STRUCTURES	12,000	4
SURVEYING, MAPPING TECHNOLOGY	900	---
TRAFFIC	500	---
TRANSPORTATION	3,700	1
WASTE DISPOSAL	400	---
WATER POLLUTION	800	---
WATER RESOURCES AND SUPPLY	2,500	1
ELECTROMAGNETIC GROUP	42,800	14
CIRCUITS, NETWORKS	1,200	---
COMMUNICATION	4,100	1
DIELECTRICS	100	---
ELECTRICAL APPLICATIONS	3,900	1
ELECTRICAL ENGINEERING	15,400	5
ELECTROMAGNETIC RADIATION	900	---
ELECTROMECHANICAL TECHNOLOGY	1,400	---
ELECTRONIC APPLICATIONS	6,800	2
INFRA-RED, RADIOMETRY	200	---
INSULATION, ELECTRICAL	200	---
MAGNETICS, MAGNETISM	400	---
NAVIGATION	800	---
PHOTOELECTRICITY	100	---
POWER, ELECTRICAL	5,000	2
RADIO FREQUENCY COMPATIBILITY	100	---
RECORDING	100	---
SUPERCONDUCTIVITY	------	---
TELECOMMUNICATIONS	2,000	1

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
DYNAMICS AND MECHANICS GROUP	40,100	13
AERODYNAMICS	4,100	1
ASTRODYNAMICS	700	---
ENERGY GENERATION AND CONVERSION	1,400	---
EXPLOSIVE EFFECTS	200	---
FLUID DYNAMICS, FLUID MECHANICS	2,400	1
FLUIDICS	200	---
FRICTION	100	---
GAS DYNAMICS	500	---
HIGH PRESSURE	100	---
HYDRAULICS	2,100	1
HYDRODYNAMICS	200	---
KINETICS	300	---
LUBRICATION	300	---
MAGNETOHYDRODYNAMICS	100	---
MASS TRANSFER	400	---
MECHANICAL APPLICATIONS, APPLIED MECHANICS	3,400	1
MECHANICAL ENGINEERING	18,300	6
MECHANICS	1,300	---
POWER, MECHANICAL	1,300	---
PROPULSION	2,600	1
VACUUM TECHNOLOGY	200	---
HEAT, LIGHT, AND APPLIED PHYSICS GROUP	8,500	3
ACOUSTICS, SONICS	600	---
APPLIED PHYSICS	600	---
ASTRONOMY AND ASTROPHYSICS	100	---
CRYOGENICS	500	---
HEAT TRANSFER	2,800	1
HIGH TEMPERATURE	100	---
HOLOGRAPHY	------	---
ILLUMINATION, LIGHTING	300	---
INSULATION, THERMAL	100	---
OPTICS	300	---
PHOTOGRAPHY	300	---
PHYSICS	500	---
PLASMAS	200	---
RADIO ASTRONOMY	------	---
SOLID STATE	500	---
THERMODYNAMICS	1,200	---
THERMOPHYSICS	100	---
ULTRASONICS	100	---
UNDERWATER ACOUSTICS	200	---
NUCLEAR GROUP	2,600	1
NUCLEAR ENGINEERING	1,500	---
NUCLEONICS	200	---
POWER, NUCLEAR	800	---
RADIATION SAFETY	100	---
RADIOACTIVITY	------	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
ENGINEERING PROCESSES AND APPLICATIONS GROUP	32,100	10
ASSEMBLY METHODS	300	---
CONTAINERIZING, PACKAGING	200	---
DRILLING	1,400	---
DRYING	200	---
ENGINEERING	21,700	7
FASTENING, JOINING	200	---
FORMING, SHAPING	300	---
MATERIAL HANDLING	1,100	---
MILITARY APPLICATIONS	2,000	1
MINIATURIZATION	------	---
PRESERVING	------	---
PROCESSES	3,400	1
REFINING	1,300	---
SIZE REDUCTION	100	---
AUTOMATION AND CONTROL GROUP	12,400	4
ADAPTIVE SYSTEMS	100	---
AUTOMATION, CYBERNETICS	500	---
CONTROL (GENERAL)	4,200	1
GUIDANCE, STABILITY	1,000	---
INSTRUMENTATION	5,500	2
MEASUREMENT, METROLOGY	500	---
SERVO-MECHANISMS	200	---
TELEMETRY	300	---
WORK MANAGEMENT AND EVALUATION GROUP	56,500	18
ARRANGEMENT	100	---
CONFIGURATION CONTROL	300	---
COST ENGINEERING	2,400	1
EQUIPMENT FACILITIES	500	---
FIRE PREVENTION AND PROTECTION	800	---
INDUSTRIAL ENGINEERING	8,100	3
MAINTAINABILITY, MAINTENANCE	2,200	1
MANUFACTURING TECHNOLOGY	4,400	1
MOTION AND TIME STUDY	------	---
NONDESTRUCTIVE TESTS	200	---
OPERATING PROCEDURES	1,000	---
OPERATIONS RESEARCH, SYSTEMS ANALYSIS	2,600	1
PLANT AND FACILITIES ENGINEERING	6,800	2
PRODUCT ENGINEERING	4,900	2
PRODUCTION METHODS	1,700	---
PRODUCTION PLANNING AND CONTROL	3,300	1
QUALITY ASSURANCE	1,200	---
QUALITY CONTROL	1,000	---
RADIOGRAPHY, X-RAYS	------	---
RELIABILITY	900	---
SAFETY ENGINEERING	600	---
SPECIFICATIONS, STANDARDS	900	---
SYSTEMS ENGINEERING	8,300	3
TESTING-ENVIRONMENTAL, OPERATIONAL	1,900	1
TESTING-LABORATORY	1,500	---
TOOLING, TOOLS	200	---
VALUE ENGINEERING	400	---
WORK METHODS AND SIMPLIFICATION	300	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
INFORMATION AND MATHEMATICS GROUP	11,500	4
COMPUTER APPLICATIONS	5,800	2
DATA PROCESSING	1,100	---
DISPLAY	400	---
DRAFTING, DRAWING, GRAPHIC TECHNOLOGY	800	---
INFORMATION RETRIEVAL	200	---
INFORMATION THEORY	100	---
LOGIC	300	---
MATHEMATICS	400	---
NEURAL NETS	------	---
REPROGRAPHY	------	---
STATISTICS	200	---
STRESS ANALYSIS	1,900	1
OTHER	9,700	3
NO REPORT	18,700	6
EMPLOYMENT PRODUCT OR SERVICE		
AGRICULTURE AND FOOD	4,000	1
AIRCRAFT AND SPACE	33,000	11
CERAMICS	2,100	1
CHEMICALS AND ALLIED PRODUCTS	19,500	6
COMMUNICATIONS	7,700	2
COMPUTERS	11,000	4
CONSTRUCTION AND CIVIL ENGINEERING	45,900	15
EDUCATIONAL AND INFORMATION SERVICES	14,600	5
ELECTRICAL EQUIPMENT AND SERVICES	19,200	6
ELECTRONIC EQUIPMENT AND SERVICES	23,000	7
LABORATORY, SCIENTIFIC, PHOTOGRAPHIC, AND OPTICAL EQUIPMENT	2,800	1
MACHINERY AND MECHANICAL EQUIPMENT	28,400	9
MARINE TRANSPORTATION	4,800	2
MEDICAL AND HEALTH SERVICES	1,300	---
METALS, BASIC (EXCEPT MINING)	12,600	4
METAL FABRICATED PRODUCTS	6,300	2
MINING	5,900	2
MOTOR VEHICLE TRANSPORTATION	2,500	1
ORDNANCE	5,200	2
PETROLEUM	15,500	5
RAILWAY AND RAPID TRANSIT	1,500	---
UTILITIES	14,700	5
OTHER PRODUCTS OR SERVICES	11,300	4
NO REPORT	15,200	5

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
PROFESSIONAL SOCIETY MEMBERSHIP		
AERONAUTICS AND ASTRONAUTICS (AIAA)	32,200	10
AGRICULTURAL (ASAE)	6,000	2
AIR POLLUTION CONTROL (APCA)	1,800	---
AUDIO (AES)	1,200	---
AUTOMOTIVE (SAE)	5,000	2
CERAMIC (NICE)	700	---
CHEMICAL (AICHE)	23,900	8
CIVIL (ASCE)	49,600	16
CONCRETE (ACI)	4,800	2
CONSULTING (AICE)	1,100	---
CORROSION (NACE)	1,900	1
COST (AACE)	1,300	---
COUNTY (NACE)	200	---
EDUCATION (ASEE)	12,500	4
ELECTRICAL AND ELECTRONICS (IEEE)	67,000	22
FIRE PROTECTION (SFPE)	1,100	---
FLUID POWER (FPS)	600	---
HEATING, REFRIGERATING, AND AIR-CONDITIONING (ASHRAE)	14,400	5
HISTORY (SHOT)	400	---
INDUSTRIAL (AIIE)	12,900	4
INSTRUMENT (ISA)	11,800	4
ILLUMINATING (IES)	1,500	---
IRON AND STEEL (AISE)	2,600	1
LUBRICATION (ASLE)	500	---
MARINE TECHNOLOGY (MTS)	1,200	---
MATERIAL MANAGEMENT (IMMS)	300	---
MECHANICAL (ASME)	49,300	16
METALS (ASM)	18,100	6
MILITARY (SAME)	6,600	2
MINING, METALLURGICAL, PETROLEUM (AIME)	32,100	10
MOTION PICTURE (SMPTE)	400	---
NAVAL ARCHITECTS AND MARINE (SNAME)	4,600	1
NAVAL ENGINEERS (ASNE)	1,800	---
NAVAL SHIP SYSTEMS COMMAND (ASE)	400	---
NONDESTRUCTIVE TESTING (ASNT)	900	---
NUCLEAR (ANS)	2,600	1
PACKAGING & HANDLING (SPHE)	100	---
PACKAGING HANDLING AND LOGISTICS (NIPHLE)	------	---
PHOTOGRAMMETRY (ASP)	600	---
PHOTOGRAPHIC (SPSE)	400	---
PHOTO-OPTICAL INSTRUMENTATION (SPIE)	500	---
PLANT (AIPE)	2,600	1
PLASTICS (SPE)	1,000	---
POWER (NAPE)	500	---
PROFESSIONAL (NSPE)	31,900	10
PULP AND PAPER (TAPPI)	1,400	---
QUALITY CONTROL (ASQC)	2,000	1

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
PROFESSIONAL SOCIETY MEMBERSHIP--CONTINUED		
RAILWAY (AREA)	700	---
REPRODUCTION (SRE)	100	---
SAFETY (ASSE)	400	---
SANITARY (ASSE)	400	---
STANDARDS (SES)	100	---
STRESS ANALYSIS (SESA)	2,700	1
TRAFFIC (ITE)	1,000	---
TESTING AND MATERIALS (ASTM)	6,000	2
TOOL AND MANUFACTURING (ASTME)	2,400	1
VALUE (SAVE)	500	---
WATER POLLUTION CONTROL (WPCF)	4,200	1
WATER WORKS (AWWA)	4,500	1
WELDING (AWS)	2,800	1
WELL LOG ANALYSTS (SPWLA)	400	---
WOMEN (SWE)	700	---
OTHER	48,800	16
NONE	5,600	2
NO REPORT	8,400	3
TOTAL REPORTING	294,000	95
REPORTING MORE THAN ONE SOCIETY	129,900	42
WORK SPONSORED		
AGRICULTURE	4,100	3
ATOMIC ENERGY	12,800	10
DEFENSE	68,200	53
EDUCATION	8,700	7
HEALTH	8,200	6
HOUSING	5,200	4
INTERNATIONAL	3,000	2
NATURAL RESOURCES	8,900	7
PUBLIC WORKS	15,500	12
RURAL DEVELOPMENT	1,900	1
SPACE	27,800	22
TRANSPORTATION	17,200	13
URBAN DEVELOPMENT	5,300	4
OTHER PROGRAM	8,700	7
REPORTING MORE THAN ONE PROGRAM	39,700	31
TOTAL REPORTING	128,200	
NO SUPPORT	154,600	
SUPPORT STATUS UNKNOWN	8,400	
NO REPORT	16,800	

NOTE - PERCENTS DO NOT ADD TO TOTAL BECAUSE OF RESPONSES INDICATING MULTIPLE SOURCES OF SUPPORT.

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY		
BIOMEDICAL GROUP	1,700	---
AQUACULTURE	------	---
BIOCHEMISTRY	100	---
BIOENGINEERING	700	---
BIOLOGICAL APPLICATIONS	100	---
BIOMECHANICS	100	---
BIONICS, MEDICAL ELECTRONICS	100	---
HEALTH PHYSICS	------	---
INDUSTRIAL HEALTH	100	---
LIFE SUPPORT	100	---
MEDICAL APPLICATIONS	200	---
PHYSIOLOGY	------	---
PUBLIC HEALTH	200	---
BEHAVIORAL AND SOCIAL GROUP	3,600	1
ECONOMICS	1,600	---
EDUCATIONAL TECHNOLOGY	1,600	---
HISTORY (TECHNOLOGICAL)	100	---
HUMAN FACTORS	300	---
PSYCHOLOGY	------	---
CHEMICAL AND MATERIALS GROUP	11,400	4
CHEMICAL APPLICATIONS	4,400	1
COMBUSTION, FUELS	1,000	---
COATING, PLATING, CLADDING	300	---
CORROSION	400	---
CRYSTALS, CRYSTALLOGRAPHY	100	---
ELECTROCHEMISTRY	300	---
FILAMENT TECHNOLOGY	200	---
FUEL CELLS	------	---
MATERIAL APPLICATIONS	3,300	1
MATERIAL PROPERTIES	1,300	---
THERMOCHEMISTRY	100	---
METALLURGICAL GROUP	12,600	4
BENEFICIATION, ORE PROCESSING	600	---
CASTING	400	---
METALLURGY (GENERAL)	4,100	1
METALLURGY, EXTRACTIVE	1,200	---
METALLURGY, PHYSICAL	3,100	1
METALLURGY, POWDER	400	---
METALLURGY, PROCESS	2,300	1
WELDING	500	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
EARTH, ATMOSPHERIC AND MARINE GROUP	10,400	3
ATMOSPHERIC SCIENCES, METEOROLOGY	100	---
DESALTING	100	---
EARTH SCIENCES	1,000	---
GEOCHEMISTRY	100	---
GEODESY	100	---
GEOLOGY	2,700	1
GEOPHYSICS	300	---
HYDROGRAPHY	------	---
HYDROLOGY	1,000	---
MARINE SCIENCES	900	---
MINING, SURFACE	1,200	---
MINING, UNDERGROUND	1,800	---
MINING, UNDERWATER	------	---
OCEANOGRAPHY	200	---
OFFSHORE OPERATIONS	500	---
UNDERWATER TECHNOLOGY	200	---
ENVIRONMENTAL AND STRUCTURAL GROUP	34,500	11
AIR POLLUTION	700	---
CONCRETE TECHNOLOGY	1,400	---
CONSERVATION, RECLAMATION	600	---
DRAINAGE, IRRIGATION	900	---
ENVIRONMENTAL CONTROL	3,300	1
ENVIRONMENTAL FACTORS	300	---
NOISE REDUCTION	100	---
PHOTOGRAMMETRY	100	---
POLLUTION	200	---
PUBLIC SAFETY	200	---
ROCK MECHANICS	200	---
SANITARY ENGINEERING	2,800	1
SOILS	1,700	---
SOLID WASTE	100	---
STRUCTURES	13,100	4
SURVEYING, MAPPING TECHNOLOGY	900	---
TRAFFIC	500	---
TRANSPORTATION	3,600	1
WASTE DISPOSAL	400	---
WATER POLLUTION	800	---
WATER RESOURCES AND SUPPLY	2,700	1
ELECTROMAGNETIC GROUP	43,200	14
CIRCUITS, NETWORKS	1,300	---
COMMUNICATION	4,000	1
DIELECTRICS	100	---
ELECTRICAL APPLICATIONS	4,000	1
ELECTRICAL ENGINEERING	15,800	5
ELECTROMAGNETIC RADIATION	900	---
ELECTROMECHANICAL TECHNOLOGY	1,400	---
ELECTRONIC APPLICATIONS	6,700	2
INFRA-RED, RADIOMETRY	200	---
INSULATION, ELECTRICAL	300	---
MAGNETICS, MAGNETISM	400	---
NAVIGATION	800	---
PHOTOELECTRICITY	100	---
POWER, ELECTRICAL	4,900	2
RADIO FREQUENCY COMPATIBILITY	100	---
RECORDING	100	---
SUPERCONDUCTIVITY	------	---
TELECOMMUNICATIONS	2,000	1

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
DYNAMICS AND MECHANICS GROUP	42,100	14
AERODYNAMICS	4,100	1
ASTRODYNAMICS	700	---
ENERGY GENERATION AND CONVERSION	1,400	---
EXPLOSIVE EFFECTS	200	---
FLUID DYNAMICS, FLUID MECHANICS	2,700	1
FLUIDICS	100	---
FRICTION	100	---
GAS DYNAMICS	600	---
HIGH PRESSURE	100	---
HYDRAULICS	2,200	1
HYDRODYNAMICS	300	---
KINETICS	400	---
LUBRICATION	300	---
MAGNETOHYDRODYNAMICS	100	---
MASS TRANSFER	400	---
MECHANICAL APPLICATIONS, APPLIED MECHANICS	3,700	1
MECHANICAL ENGINEERING	19,100	6
MECHANICS	1,400	---
POWER, MECHANICAL	1,400	---
PROPULSION	2,600	1
VACUUM TECHNOLOGY	200	---
HEAT, LIGHT, AND APPLIED PHYSICS GROUP	8,400	3
ACOUSTICS, SONICS	500	---
APPLIED PHYSICS	600	---
ASTRONOMY AND ASTROPHYSICS	100	---
CRYOGENICS	400	---
HEAT TRANSFER	2,900	1
HIGH TEMPERATURE	100	---
HOLOGRAPHY	------	---
ILLUMINATION, LIGHTING	300	---
INSULATION, THERMAL	200	---
OPTICS	300	---
PHOTOGRAPHY	300	---
PHYSICS	500	---
PLASMAS	200	---
RADIO ASTRONOMY	------	---
SOLID STATE	500	---
THERMODYNAMICS	1,300	---
THERMOPHYSICS	100	---
ULTRASONICS	------	---
UNDERWATER ACOUSTICS	200	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
NUCLEAR GROUP	2,400	1
NUCLEAR ENGINEERING	1,500	---
NUCLEONICS	200	---
POWER, NUCLEAR	700	---
RADIATION SAFETY	------	---
RADIOACTIVITY	100	---
ENGINEERING PROCESSES AND APPLICATIONS GROUP	32,100	10
ASSEMBLY METHODS	200	---
CONTAINERIZING, PACKAGING	200	---
DRILLING	1,400	---
DRYING	200	---
ENGINEERING	22,200	7
FASTENING, JOINING	100	---
FORMING, SHAPING	200	---
MATERIAL HANDLING	900	---
MILITARY APPLICATIONS	1,700	---
MINIATURIZATION	------	---
PRESERVING	------	---
PROCESSES	3,600	1
REFINING	1,200	---
SIZE REDUCTION	------	---
AUTOMATION AND CONTROL GROUP	12,300	4
ADAPTIVE SYSTEMS	100	---
AUTOMATION, CYBERNETICS	500	---
CONTROL (GENERAL)	4,100	1
GUIDANCE, STABILITY	900	---
INSTRUMENTATION	5,400	2
MEASUREMENT, METROLOGY	500	---
SERVO-MECHANISMS	300	---
TELEMETRY	300	---
WORK MANAGEMENT AND EVALUATION GROUP	53,900	18
ARRANGEMENT	100	---
CONFIGURATION CONTROL	200	---
COST ENGINEERING	2,200	1
EQUIPMENT FACILITIES	400	---
FIRE PREVENTION AND PROTECTION	700	---
INDUSTRIAL ENGINEERING	8,100	3
MAINTAINABILITY, MAINTENANCE	2,000	1
MANUFACTURING TECHNOLOGY	4,300	1
MOTION AND TIME STUDY	100	---
NONDESTRUCTIVE TESTS	200	---
OPERATING PROCEDURES	900	---
OPERATIONS RESEARCH, SYSTEMS ANALYSIS	2,500	1
PLANT AND FACILITIES ENGINEERING	6,500	2
PRODUCT ENGINEERING	4,800	2
PRODUCTION METHODS	1,700	---
PRODUCTION PLANNING AND CONTROL	3,200	1
QUALITY ASSURANCE	900	---

GENERAL CHARACTERISTICS OF ENGINEERS MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
QUALITY CONTROL	900	---
RADIOGRAPHY, X-RAYS	------	---
RELIABILITY	700	---
SAFETY ENGINEERING	500	---
SPECIFICATIONS, STANDARDS	700	---
SYSTEMS ENGINEERING	8,200	3
TESTING-ENVIRONMENTAL, OPERATIONAL	1,800	---
TESTING-LABORATORY	1,300	---
TOOLING, TOOLS	200	---
VALUE ENGINEERING	300	---
WORK METHODS AND SIMPLIFICATION	300	---
INFORMATION AND MATHEMATICS GROUP	10,600	3
COMPUTER APPLICATIONS	5,200	2
DATA PROCESSING	1,000	---
DISPLAY	400	---
DRAFTING, DRAWING, GRAPHIC TECHNOLOGY	700	---
INFORMATION RETRIEVAL	200	---
INFORMATION THEORY	100	---
LOGIC	300	---
MATHEMATICS	400	---
NEURAL NETS	------	---
REPROGRAPHY	------	---
STATISTICS	200	---
STRESS ANALYSIS	2,000	1
OTHER	9,000	3
NO REPORT	19,800	6
REGISTERED ENGINEERS		
YES	131,100	42
NUMBER OF STATES		
1	101,500	33
2	16,800	5
3	4,900	2
4	2,200	1
5	1,000	---
6	800	---
7	500	---
8	500	---
9	200	---
10 OR MORE	600	---
NO REPORT OF NUMBER OF STATES	2,000	1
NO	171,400	56
NO REPORT	5,400	2

NOTE - GROUPS OR PERCENTS MAY NOT ADD TO TOTAL BECAJSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

GEOGRAPHIC LOCATIONS OF ENGINEERS MEETING CRITERIA IN 1969

GEOGRAPHIC LOCATION	NUMBER	PERCENT
ALL LOCATIONS	308,000	100
NEW ENGLAND	21,800	7
CONNECTICUT	6,600	2
MAINE	700	---
MASSACHUSETTS	12,300	4
NEW HAMPSHIRE	900	---
RHODE ISLAND	1,000	---
VERMONT	500	---
MIDDLE ATLANTIC	66,400	22
NEW JERSEY	14,500	5
NEW YORK	29,200	9
PENNSYLVANIA	22,700	7
EAST NORTH CENTRAL	52,200	17
ILLINOIS	14,800	5
INDIANA	5,800	2
MICHIGAN	9,200	3
OHIO	17,500	6
WISCONSIN	5,000	2
WEST NORTH CENTRAL	18,500	6
IOWA	2,800	1
KANSAS	2,000	1
MINNESOTA	4,600	1
MISSOURI	7,000	2
NEBRASKA	1,500	---
NORTH DAKOTA	300	---
SOUTH DAKOTA	400	---
SOUTH ATLANTIC	39,300	13
DELAWARE	2,100	1
DISTRICT OF COLUMBIA	5,900	2
FLORIDA	6,700	2
GEORGIA	3,100	1
MARYLAND	7,600	2
NORTH CAROLINA	3,700	1
SOUTH CAROLINA	2,000	1
VIRGINIA	6,300	2
WEST VIRGINIA	2,000	1

GEOGRAPHIC LOCATIONS OF ENGINEERS MEETING CRITERIA IN 1969

GEOGRAPHIC LOCATION--CONTINUED	NUMBER	PERCENT
EAST SOUTH CENTRAL	11,900	4
ALABAMA	4,000	1
KENTUCKY	1,900	1
MISSISSIPPI	1,200	---
TENNESSEE	4,800	2
WEST SOUTH CENTRAL	29,500	10
ARKANSAS	900	---
LOUISIANA	5,100	2
OKLAHOMA	4,300	1
TEXAS	19,200	6
MOUNTAIN	14,800	5
ARIZONA	3,100	1
COLORADO	4,800	2
IDAHO	900	---
MONTANA	800	---
NEVADA	900	---
NEW MEXICO	2,000	1
UTAH	1,600	---
WYOMING	500	---
PACIFIC	50,700	16
ALASKA	600	---
CALIFORNIA	41,400	13
HAWAII	1,000	---
OREGON	1,700	---
WASHINGTON	6,000	2
U.S. TERRITORIES AND POSSESSIONS	500	---
CANAL ZONE	------	---
GUAM	------	---
PUERTO RICO	500	---
VIRGIN ISLANDS	------	---
FOREIGN	2,200	1

NOTE - GROUPS OR PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRI

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CURRICULUM OF HIGHEST DEGREE	TOTAL	DOCTORATE	PROFESS-IONAL MEDICAL	PROFESS-IONAL ENGINEER-ING
ALL CURRICULA - - - - - -	308,000	24,500	100	13,200
AERONAUTICAL AND ASTRONAUTICAL	13,100	1,300	------	400
AGRICULTURAL - - - - - - - - -	4,700	400	------	------
ARCHITECHURAL - - - - - - - - -	1,300	------	------	------
BIOENGINEERING - - - - - - - -	400	100	------	------
CERAMIC - - - - - - - - - - - -	500	100	------	------
CHEMICAL - - - - - - - - - - -	26,600	4,200	------	700
CIVIL - - - - - - - - - - - - -	43,600	2,100	------	2,100
COMMUNICATIONS - - - - - - - -	1,600	100	------	100
CONSTRUCTION - - - - - - - - -	600	------	------	100
ELECTRICAL - - - - - - - - - -	47,200	2,000	------	2,400
ELECTRONIC - - - - - - - - - -	16,800	700	------	400
ENGINEERING MECHANICS - - - - -	4,700	1,500	------	100
ENGINEERING GENERAL - - - - - -	4,900	200	------	500
ENGINEERING PHYSICS - - - - - -	1,700	300	------	------
ENGINEERING SCIENCE - - - - - -	2,100	400	------	------
ENGINEERING TECHNOLOGY - - - -	800	------	------	100
ENVIRONMENTAL - - - - - - - - -	600	100	------	------
GEOLOGICAL - - - - - - - - - -	4,200	600	------	200
GEOPHYSICAL - - - - - - - - - -	300	100	------	------
INDUSTRIAL - - - - - - - - - -	11,300	500	------	300
MARINE - - - - - - - - - - - -	1,300	------	------	------
MATERIALS - - - - - - - - - - -	900	400	------	------
MECHANICAL - - - - - - - - - -	57,200	2,700	------	2,800
METALLURGICAL - - - - - - - - -	12,800	2,500	------	700
MINERAL - - - - - - - - - - - -	400	------	------	------
MINING - - - - - - - - - - - -	4,200	100	------	900
NAVAL ARCHITECTURE - - - - - -	1,300	------	------	100
NUCLEAR - - - - - - - - - - - -	700	200	------	------
PETROLEUM - - - - - - - - - - -	6,400	200	------	400
SANITARY - - - - - - - - - - -	1,900	300	------	100
TEXTILE - - - - - - - - - - - -	200	------	------	------
TRANSPORTATION - - - - - - - -	600	100	------	100
WELDING - - - - - - - - - - - -	100	------	------	------
OTHER ENGINEERING - - - - - - -	6,400	600	------	300
BUSINESS ADMINISTRATION - - - -	7,300	100	------	------
CHEMISTRY - - - - - - - - - - -	1,700	500	------	------
PHYSICS - - - - - - - - - - - -	4,100	600	------	------
OTHER NONENGINEERING - - - - -	7,000	1,200	100	------
NO REPORT - - - - - - - - - - -	6,800	------	------	200

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULUM AND HIGHEST DEGREE, 1969

GREE	TOTAL	HIGHEST DEGREE: DOCTORATE	PROFESSIONAL MEDICAL	PROFESSIONAL ENGINEERING	MASTER'S	BACHELOR'S	ASSOCIATE	LESS THAN ASSOCIATE	FOREIGN DEGREE, LEVEL UNKNOWN	NO REPORT
- - -	308,000	24,500	100	13,200	71,100	185,300	300	9,100	400	4,000
ICAL	13,100	1,300	------	400	4,000	7,100	------	200	------	------
- - -	4,700	400	------	------	1,300	2,900	------	------	------	------
- - -	1,300	------	------	------	200	1,000	------	100	------	------
- - -	400	100	------	------	100	200	------	------	------	------
- - -	500	100	------	------	100	300	------	------	------	------
- - -	26,600	4,200	------	700	5,700	15,700	------	200	------	------
- - -	43,600	2,100	------	2,100	7,900	31,000	------	300	100	------
- - -	1,600	100	------	100	500	800	------	100	------	------
- - -	600	------	------	100	200	300	------	------	------	------
- - -	47,200	2,000	------	2,400	6,800	34,600	100	1,200	100	------
- - -	16,800	700	------	400	5,300	9,400	------	900	------	------
- - -	4,700	1,500	------	100	1,600	1,300	------	200	------	------
- - -	4,900	200	------	500	600	2,900	------	700	------	------
- - -	1,700	300	------	------	300	900	------	100	------	------
- - -	2,100	400	------	------	800	700	------	------	------	------
- - -	800	------	------	100	100	400	------	100	------	------
- - -	600	100	------	------	200	200	------	------	------	------
- - -	4,200	600	------	200	900	2,400	------	------	------	------
- - -	300	100	------	------	100	100	------	------	------	------
- - -	11,300	500	------	300	2,600	7,400	------	500	------	------
- - -	1,300	------	------	------	100	1,100	------	100	------	------
- - -	900	400	------	------	300	100	------	------	------	------
- - -	57,200	2,700	------	2,800	9,500	40,900	------	1,100	100	------
- - -	12,800	2,500	------	700	3,200	6,100	------	200	------	------
- - -	400	------	------	------	200	200	------	------	------	------
- - -	4,200	100	------	900	400	2,700	------	100	------	------
- - -	1,300	------	------	100	500	600	------	100	------	------
- - -	700	200	------	------	500	100	------	------	------	------
- - -	6,400	200	------	400	900	4,800	------	100	------	------
- - -	1,900	300	------	100	1,400	200	------	------	------	------
- - -	200	------	------	------	------	200	------	------	------	------
- - -	600	100	------	100	300	100	------	------	------	------
- - -	100	------	------	------	------	------	------	------	------	------
- - -	6,400	600	------	300	2,800	2,400	------	300	------	------
- - -	7,300	100	------	------	6,300	600	------	200	------	------
- - -	1,700	500	------	------	300	800	------	------	------	------
- - -	4,100	600	------	------	1,200	2,200	------	100	------	------
- - -	7,000	1,200	100	------	3,400	2,200	------	100	------	------
- - -	6,800	------	------	200	200	400	------	1,900	------	4,000

TO TOTAL BECAUSE OF ROUNDING.

OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969

CHARACTERISTICS	NUMBER	PERCENT
ENGINEERS REPORTING	37,500	100
MEN	36,800	98
WOMEN	800	2
EMPLOYMENT STATUS		
FULL-TIME PROFESSIONALLY EMPLOYED	32,600	87
PART-TIME PROFESSIONALLY EMPLOYED	1,000	3
UNEMPLOYED AND SEEKING EMPLOYMENT	400	1
NOT EMPLOYED AND NOT SEEKING EMPLOYMENT	700	2
RETIRED	2,400	6
NO REPORT	400	1
STUDENT STATUS		
FULL-TIME STUDENT	700	2
PART-TIME STUDENT	1,700	4
NO REPORT	35,200	94
TYPE OF EMPLOYER		
PRIVATE INDUSTRY OR BUSINESS	26,000	69
SELF-EMPLOYED	1,500	4
COLLEGE OR UNIVERSITY	1,700	4
JUNIOR COLLEGE OR TECHNICAL INSTITUTE	400	1
SECONDARY, ELEMENTARY OR OTHER SCHOOL	200	---
NONPROFIT ORGANIZATION, OTHER THAN A SCHOOL	600	2
FEDERAL GOVERNMENT-CIVILIAN EMPLOYEE	2,000	5
USPHS, MILITARY SERVICE-ACTIVE DUTY	200	---
STATE GOVERNMENT	100	---
LOCAL GOVERNMENT	200	---
OTHER	600	2
NOT EMPLOYED	3,500	9
NO REPORT	400	1

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUE

CHARACTERISTICS	NUMBER	PERCENT
AGE (MEDIAN AGE 46)		
24 OR UNDER	1,800	5
25-29	2,200	6
30-34	3,300	9
35-39	4,600	12
40-44	5,600	15
45-49	5,500	15
50-54	5,100	14
55-59	3,500	9
60-64	2,500	7
65-69	1,500	4
70 AND OVER	1,500	4
NO REPORT	600	2
PROFESSIONAL IDENTIFICATION		
ENGINEER	12,500	33
ARCHITECT	100	---
PHYSICIST	1,800	5
CHEMIST	1,400	4
GEOLOGIST	200	---
MATHEMATICAN	700	2
METALLURGIST	1,400	4
TECHNICIAN	4,400	12
OTHER	13,000	35
NO REPORT	2,100	6
EMPLOYMENT AREA OF TECHNOLOGY		
BIOMEDICAL GROUP	400	1
AQUACULTURE	------	---
BIOCHEMISTRY	------	---
BIOENGINEERING	------	---
BIOLOGICAL APPLICATIONS	------	---
BIOMECHANICS	------	---
BIONICS, MEDICAL ELECTRONICS	------	---
HEALTH PHYSICS	------	---
INDUSTRIAL HEALTH	------	---
LIFE SUPPORT	------	---
MEDICAL APPLICATIONS	100	---
PHYSIOLOGY	------	---
PUBLIC HEALTH	------	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT FUNCTION		
ADVISING, CONSULTATION	2,500	7
CONSTRUCTION, INSTALLATION	1,000	3
COORDINATION, LIAISON	600	2
COST ESTIMATING, BUDGETING, PROCUREMENT, PURCHASING	1,100	3
DESIGN	2,800	7
DEVELOPMENT	1,400	4
DRAFTING, DRAWING, GRAPHICS	300	1
EXPLORATION	200	---
INFORMATION AND DATA PROCESSING, OR TECHNICAL WRITING	900	2
PLANNING, DIRECTING	5,400	14
PRODUCTION, OPERATIONS, MAINTENANCE	3,300	9
QUALITY ASSURANCE AND CONTROL, RELIABILITY	800	2
RESEARCH	2,400	6
SALES, TECHNICAL SERVICES	4,400	12
SPECIFYING	100	---
TEACHING, INSTRUCTING, TRAINING	1,400	4
TESTING, EVALUATION, INSPECTION	1,400	4
OTHER	900	2
NO REPORT	6,800	18
EMPLOYMENT SUPERVISORY RESPONSIBILITY		
NO REGULAR SUPERVISION GIVEN	6,800	18
INDIRECT OR STAFF SUPERVISION	4,600	12
SUPERVISION OF TEAM OR UNIT	3,400	9
SUPERVISION OF PROJECT OR SECTION	5,100	14
MANAGEMENT OF MAJOR DEPARTMENT, DIVISION, OR PROGRAM	6,300	17
GENERAL MANAGEMENT OF ORGANIZATION	3,800	10
NO REPORT	7,600	20
YEARS OF PROFESSIONAL EXPERIENCE		
1 YEAR OR LESS	300	1
2-4	2,200	6
5-9	3,200	8
10-14	4,300	11
15-19	4,300	11
20-24	3,400	9
25-29	2,400	6
30-34	1,800	5
35-39	1,000	3
40 OR MORE	1,800	5
NO REPORT	12,800	34
HIGHEST DEGREE		
DOCTORATE	2,400	6
PROFESSIONAL MEDICAL	100	---
PROFESSIONAL ENGINEERING	500	1
MASTER'S	3,200	8
BACHELOR'S	9,300	25
ASSOCIATE	2,800	7
LESS THAN ASSOCIATE	5,700	15
FOREIGN DEGREE, LEVEL UNKNOWN	1,200	3
NO REPORT	12,400	33

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
BEHAVIORAL AND SOCIAL GROUP	800	2
ECONOMICS	200	---
EDUCATIONAL TECHNOLOGY	600	2
HISTORY (TECHNOLOGICAL)	------	---
HUMAN FACTORS	100	---
PSYCHOLOGY	------	---
CHEMICAL AND MATERIALS GROUP	1,600	4
CHEMICAL APPLICATIONS	500	1
COMBUSTION, FUELS	100	---
COATING, PLATING, CLADDING	100	---
CORROSION	100	---
CRYSTALS, CRYSTALLOGRAPHY	------	---
ELECTROCHEMISTRY	------	---
FILAMENT TECHNOLOGY	------	---
FUEL CELLS	------	---
MATERIAL APPLICATIONS	600	2
MATERIAL PROPERTIES	200	---
THERMOCHEMISTRY	------	---
METALLURGICAL GROUP	2,200	6
BENEFICIATION, ORE PROCESSING	100	---
CASTING	200	---
METALLURGY (GENERAL)	1,100	3
METALLURGY, EXTRACTIVE	100	---
METALLURGY, PHYSICAL	200	---
METALLURGY, POWDER	100	---
METALLURGY, PROCESS	400	1
WELDING	100	---
EARTH, ATMOSPHERIC AND MARINE GROUP	800	2
ATMOSPHERIC SCIENCES, METEOROLOGY	------	---
DESALTING	------	---
EARTH SCIENCES	------	---
GEOCHEMISTRY	------	---
GEODESY	------	---
GEOLOGY	100	---
GEOPHYSICS	100	---
HYDROGRAPHY	------	---
HYDROLOGY	------	---
MARINE SCIENCES	100	---
MINING, SURFACE	100	---
MINING, UNDERGROUND	200	---
MINING, UNDERWATER	------	---
OCEANOGRAPHY	------	---
OFFSHORE OPERATIONS	------	---
UNDERWATER TECHNOLOGY	------	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
ENVIRONMENTAL AND STRUCTURAL GROUP	1,500	4
AIR POLLUTION	100	---
CONCRETE TECHNOLOGY	------	---
CONSERVATION, RECLAMATION	------	---
DRAINAGE, IRRIGATION	------	---
ENVIRONMENTAL CONTROL	700	2
ENVIRONMENTAL FACTORS	------	---
NOISE REDUCTION	------	---
PHOTOGRAMMETRY	------	---
POLLUTION	------	---
PUBLIC SAFETY	------	---
ROCK MECHANICS	------	---
SANITARY ENGINEERING	------	---
SOILS	------	---
SOLID WASTE	------	---
STRUCTURES	200	---
SURVEYING, MAPPING TECHNOLOGY	------	---
TRAFFIC	------	---
TRANSPORTATION	200	---
WASTE DISPOSAL	------	---
WATER POLLUTION	------	---
WATER RESOURCES AND SUPPLY	100	---
ELECTROMAGNETIC GROUP	4,100	11
CIRCUITS, NETWORKS	100	---
COMMUNICATION	700	2
DIELECTRICS	------	---
ELECTRICAL APPLICATIONS	500	1
ELECTRICAL ENGINEERING	800	2
ELECTROMAGNETIC RADIATION	100	---
ELECTROMECHANICAL TECHNOLOGY	100	---
ELECTRONIC APPLICATIONS	1,000	3
INFRA-RED, RADIOMETRY	------	---
INSULATION, ELECTRICAL	------	---
MAGNETICS, MAGNETISM	------	---
NAVIGATION	------	---
PHOTOELECTRICITY	------	---
POWER, ELECTRICAL	300	1
RADIO FREQUENCY COMPATIBILITY	------	---
RECORDING	100	---
SUPERCONDUCTIVITY	------	---
TELECOMMUNICATIONS	300	1

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
DYNAMICS AND MECHANICS GROUP	2,600	7
AERODYNAMICS	100	---
ASTRODYNAMICS	100	---
ENERGY GENERATION AND CONVERSION	100	---
EXPLOSIVE EFFECTS	100	---
FLUID DYNAMICS, FLUID MECHANICS	100	---
FLUIDICS	------	---
FRICTION	------	---
GAS DYNAMICS	------	---
HIGH PRESSURE	------	---
HYDRAULICS	100	---
HYDRODYNAMICS	------	---
KINETICS	------	---
LUBRICATION	100	---
MAGNETOHYDRODYNAMICS	------	---
MASS TRANSFER	------	---
MECHANICAL APPLICATIONS, APPLIED MECHANICS	600	2
MECHANICAL ENGINEERING	1,100	3
MECHANICS	------	---
POWER, MECHANICAL	------	---
PROPULSION	100	---
VACUUM TECHNOLOGY	------	---
HEAT, LIGHT, AND APPLIED PHYSICS GROUP	1,500	4
ACOUSTICS, SONICS	------	---
APPLIED PHYSICS	200	---
ASTRONOMY AND ASTROPHYSICS	------	---
CRYOGENICS	------	---
HEAT TRANSFER	300	1
HIGH TEMPERATURE	------	---
HOLOGRAPHY	------	---
ILLUMINATION, LIGHTING	------	---
INSULATION, THERMAL	100	---
OPTICS	100	---
PHOTOGRAPHY	------	---
PHYSICS	500	1
PLASMAS	------	---
RADIO ASTRONOMY	------	---
SOLID STATE	100	---
THERMODYNAMICS	100	---
THERMOPHYSICS	------	---
ULTRASONICS	------	---
UNDERWATER ACOUSTICS	------	---
NUCLEAR GROUP	200	---
NUCLEAR ENGINEERING	100	---
NUCLEONICS	------	---
POWER, NUCLEAR	------	---
RADIATION SAFETY	------	---
RADIOACTIVITY	------	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
ENGINEERING PROCESSES AND APPLICATIONS GROUP	1,600	4
ASSEMBLY METHODS	------	---
CONTAINERIZING, PACKAGING	------	---
DRILLING	200	---
DRYING	------	---
ENGINEERING	800	2
FASTENING, JOINING	------	---
FORMING, SHAPING	100	---
MATERIAL HANDLING	200	---
MILITARY APPLICATIONS	100	---
MINIATURIZATION	------	---
PRESERVING	------	---
PROCESSES	100	---
REFINING	------	---
SIZE REDUCTION	------	---
AUTOMATION AND CONTROL GROUP	2,400	6
ADAPTIVE SYSTEMS	------	---
AUTOMATION, CYBERNETICS	100	---
CONTROL (GENERAL)	500	1
GUIDANCE, STABILITY	100	---
INSTRUMENTATION	1,500	4
MEASUREMENT, METROLOGY	200	---
SERVO-MECHANISMS	------	---
TELEMETRY	------	---
WORK MANAGEMENT AND EVALUATION GROUP	7,300	19
ARRANGEMENT	100	---
CONFIGURATION CONTROL	------	---
COST ENGINEERING	400	1
EQUIPMENT FACILITIES	------	---
FIRE PREVENTION AND PROTECTION	100	---
INDUSTRIAL ENGINEERING	1,800	5
MAINTAINABILITY, MAINTENANCE	500	1
MANUFACTURING TECHNOLOGY	500	1
MOTION AND TIME STUDY	------	---
NONDESTRUCTIVE TESTS	100	---
OPERATING PROCEDURES	100	---
OPERATIONS RESEARCH, SYSTEMS ANALYSIS	300	1
PLANT AND FACILITIES ENGINEERING	500	1
PRODUCT ENGINEERING	400	1
PRODUCTION METHODS	200	---
PRODUCTION PLANNING AND CONTROL	300	1
QUALITY ASSURANCE	200	---
QUALITY CONTROL	200	---
RADIOGRAPHY, X-RAYS	------	---
RELIABILITY	100	---
SAFETY ENGINEERING	100	---
SPECIFICATIONS, STANDARDS	100	---
SYSTEMS ENGINEERING	500	1
TESTING-ENVIRONMENTAL, OPERATIONAL	300	1
TESTING-LABORATORY	300	1
TOOLING, TOOLS	200	---
VALUE ENGINEERING	------	---
WORK METHODS AND SIMPLIFICATION	100	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
EMPLOYMENT AREA OF TECHNOLOGY--CONTINUED		
INFORMATION AND MATHEMATICS GROUP	1,800	5
COMPUTER APPLICATIONS	600	2
DATA PROCESSING	200	---
DISPLAY	------	---
DRAFTING, DRAWING, GRAPHIC TECHNOLOGY	500	1
INFORMATION RETRIEVAL	200	---
INFORMATION THEORY	------	---
LOGIC	------	---
MATHEMATICS	200	---
NEURAL NETS	------	---
REPROGRAPHY	------	---
STATISTICS	100	---
STRESS ANALYSIS	------	---
OTHER	1,700	4
NO REPORT	7,000	19
EMPLOYMENT PRODUCT OR SERVICE		
AGRICULTURE AND FOOD	400	1
AIRCRAFT AND SPACE	2,800	7
CERAMICS	400	1
CHEMICALS AND ALLIED PRODUCTS	1,600	4
COMMUNICATIONS	1,400	4
COMPUTERS	1,300	3
CONSTRUCTION AND CIVIL ENGINEERING	1,400	4
EDUCATIONAL AND INFORMATION SERVICES	1,900	5
ELECTRICAL EQUIPMENT AND SERVICES	1,800	5
ELECTRONIC EQUIPMENT AND SERVICES	3,100	8
LABORATORY, SCIENTIFIC, PHOTOGRAPHIC, AND OPTICAL EQUIPMENT	700	2
MACHINERY AND MECHANICAL EQUIPMENT	4,600	12
MARINE TRANSPORTATION	600	2
MEDICAL AND HEALTH SERVICES	300	1
METALS, BASIC (EXCEPT MINING)	2,500	7
METAL FABRICATED PRODUCTS	1,400	4
MINING	800	2
MOTOR VEHICLE TRANSPORTATION	300	1
ORDNANCE	400	1
PETROLEUM	1,100	3
RAILWAY AND RAPID TRANSIT	100	---
UTILITIES	700	2
OTHER PRODUCTS OR SERVICES	2,100	6
NO REPORT	5,600	15

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
PROFESSIONAL SOCIETY MEMBERSHIP		
AERONAUTICS AND ASTRONAUTICS (AIAA) - - - - - - - - - - -	3,100	8
AGRICULTURAL (ASAE) - - - - - - - - - - - - - - - - - - -	500	1
AIR POLLUTION CONTROL (APCA) - - - - - - - - - - - - - -	200	---
AUDIO (AES) -	200	---
AUTOMOTIVE (SAE) -	400	1
CERAMIC (NICE) -	100	---
CHEMICAL (AICHE) -	600	2
CIVIL (ASCE) -	900	2
CONCRETE (ACI) -	100	---
CONSULTING (AICE) - - - - - - - - - - - - - - - - - - -	------	---
CORROSION (NACE) -	200	---
COST (AACE) -	300	1
COUNTY (NACE) -	------	---
EDUCATION (ASEE) -	1,200	3
ELECTRICAL AND ELECTRONICS (IEEE) - - - - - - - - - - -	6,500	17
FIRE PROTECTION (SFPE) - - - - - - - - - - - - - - - - -	200	---
FLUID POWER (FPS) - - - - - - - - - - - - - - - - - - -	100	---
HEATING, REFRIGERATING, AND AIR-CONDITIONING (ASHRAE)	3,700	10
HISTORY (SHOT) -	100	---
INDUSTRIAL (AIIE) - - - - - - - - - - - - - - - - - - -	2,900	8
INSTRUMENT (ISA) -	3,900	10
ILLUMINATING (IES) - - - - - - - - - - - - - - - - - - -	100	---
IRON AND STEEL (AISE) - - - - - - - - - - - - - - - - -	400	1
LUBRICATION (ASLE) - - - - - - - - - - - - - - - - - - -	100	---
MARINE TECHNOLOGY (MTS) - - - - - - - - - - - - - - - -	100	---
MATERIAL MANAGEMENT (IMMS) - - - - - - - - - - - - - - -	100	---
MECHANICAL (ASME) - - - - - - - - - - - - - - - - - - -	2,100	6
METALS (ASM) -	4,600	12
MILITARY (SAME) -	400	1
MINING, METALLURGICAL, PETROLEUM (AIME) - - - - - - - -	3,900	10
MOTION PICTURE (SMPTE) - - - - - - - - - - - - - - - - -	100	---
NAVAL ARCHITECTS AND MARINE (SNAME) - - - - - - - - - -	800	2
NAVAL ENGINEERS (ASNE) - - - - - - - - - - - - - - - - -	100	---
NAVAL SHIP SYSTEMS COMMAND (ASE) - - - - - - - - - - - -	------	---
NONDESTRUCTIVE TESTING (ASNT) - - - - - - - - - - - - -	200	---
NUCLEAR (ANS) -	300	1
PACKAGING & HANDLING (SPHE) - - - - - - - - - - - - - -	------	---
PACKAGING HANDLING AND LOGISTICS (NIPHLE) - - - - - - -	------	---
PHOTOGRAMMETRY (ASP) - - - - - - - - - - - - - - - - - -	100	---
PHOTOGRAPHIC (SPSE) - - - - - - - - - - - - - - - - - -	100	---
PHOTO-OPTICAL INSTRUMENTATION (SPIE) - - - - - - - - - -	100	---
PLANT (AIPE) -	800	2
PLASTICS (SPE) -	200	---
POWER (NAPE) -	100	---
PROFESSIONAL (NSPE) - - - - - - - - - - - - - - - - - -	200	---
PULP AND PAPER (TAPPI) - - - - - - - - - - - - - - - - -	100	---
QUALITY CONTROL (ASQC) - - - - - - - - - - - - - - - - -	400	1

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
PROFESSIONAL SOCIETY MEMBERSHIP--CONTINUED		
RAILWAY (AREA)	------	---
REPRODUCTION (SRE)	------	---
SAFETY (ASSE)	100	---
SANITARY (ASSE)	------	---
STANDARDS (SES)	------	---
STRESS ANALYSIS (SESA)	300	1
TRAFFIC (ITE)	------	---
TESTING AND MATERIALS (ASTM)	600	2
TOOL AND MANUFACTURING (ASTME)	700	2
VALUE (SAVE)	100	---
WATER POLLUTION CONTROL (WPCF)	100	---
WATER WORKS (AWWA)	100	---
WELDING (AWS)	400	1
WELL LOG ANALYSTS (SPWLA)	------	---
WOMEN (SWE)	500	1
OTHER	7,400	20
NONE	900	2
NO REPORT	2,400	6
TOTAL REPORTING	34,300	91
REPORTING MORE THAN ONE SOCIETY	12,300	33
WORK SPONSORED		
AGRICULTURE	300	3
ATOMIC ENERGY	1,400	13
DEFENSE	6,200	57
EDUCATION	1,300	12
HEALTH	800	7
HOUSING	400	4
INTERNATIONAL	200	2
NATURAL RESOURCES	400	4
PUBLIC WORKS	600	6
RURAL DEVELOPMENT	100	1
SPACE	3,000	28
TRANSPORTATION	1,100	10
URBAN DEVELOPMENT	300	3
OTHER PROGRAM	800	7
REPORTING MORE THAN ONE PROGRAM	3,500	32
TOTAL REPORTING	10,900	
NO SUPPORT	20,000	
SUPPORT STATUS UNKNOWN	2,000	
NO REPORT	4,600	

NOTE - PERCENTS DO NOT ADD TO TOTAL BECAUSE OF RESPONSES INDICATING MULTIPLE SOURCES OF SUPPORT.

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY		
BIOMEDICAL GROUP	400	1
AQUACULTURE	------	---
BIOCHEMISTRY	------	---
BIOENGINEERING	------	---
BIOLOGICAL APPLICATIONS	------	---
BIOMECHANICS	------	---
BIONICS, MEDICAL ELECTRONICS	------	---
HEALTH PHYSICS	------	---
INDUSTRIAL HEALTH	------	---
LIFE SUPPORT	------	---
MEDICAL APPLICATIONS	100	---
PHYSIOLOGY	100	---
PUBLIC HEALTH	------	---
BEHAVIORAL AND SOCIAL GROUP	800	2
ECONOMICS	200	---
EDUCATIONAL TECHNOLOGY	500	1
HISTORY (TECHNOLOGICAL)	------	---
HUMAN FACTORS	100	---
PSYCHOLOGY	------	---
CHEMICAL AND MATERIALS GROUP	1,500	4
CHEMICAL APPLICATIONS	500	1
COMBUSTION, FUELS	100	---
COATING, PLATING, CLADDING	100	---
CORROSION	100	---
CRYSTALS, CRYSTALLOGRAPHY	------	---
ELECTROCHEMISTRY	100	---
FILAMENT TECHNOLOGY	------	---
FUEL CELLS	------	---
MATERIAL APPLICATIONS	500	1
MATERIAL PROPERTIES	100	---
THERMOCHEMISTRY	------	---
METALLURGICAL GROUP	2,200	6
BENEFICIATION, ORE PROCESSING	100	---
CASTING	200	---
METALLURGY (GENERAL)	1,000	3
METALLURGY, EXTRACTIVE	100	---
METALLURGY, PHYSICAL	300	1
METALLURGY, POWDER	------	---
METALLURGY, PROCESS	400	1
WELDING	100	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
EARTH, ATMOSPHERIC AND MARINE GROUP	800	2
ATMOSPHERIC SCIENCES, METEOROLOGY	------	---
DESALTING	------	---
EARTH SCIENCES	------	---
GEOCHEMISTRY	------	---
GEODESY	------	---
GEOLOGY	200	---
GEOPHYSICS	100	---
HYDROGRAPHY	------	---
HYDROLOGY	------	---
MARINE SCIENCES	100	---
MINING, SURFACE	100	---
MINING, UNDERGROUND	100	---
MINING, UNDERWATER	------	---
OCEANOGRAPHY	------	---
OFFSHORE OPERATIONS	------	---
UNDERWATER TECHNOLOGY	------	---
ENVIRONMENTAL AND STRUCTURAL GROUP	1,400	4
AIR POLLUTION	100	---
CONCRETE TECHNOLOGY	------	---
CONSERVATION, RECLAMATION	------	---
DRAINAGE, IRRIGATION	------	---
ENVIRONMENTAL CONTROL	600	2
ENVIRONMENTAL FACTORS	------	---
NOISE REDUCTION	------	---
PHOTOGRAMMETRY	------	---
POLLUTION	------	---
PUBLIC SAFETY	------	---
ROCK MECHANICS	------	---
SANITARY ENGINEERING	------	---
SOILS	------	---
SOLID WASTE	------	---
STRUCTURES	200	---
SURVEYING, MAPPING TECHNOLOGY	------	---
TRAFFIC	------	---
TRANSPORTATION	200	---
WASTE DISPOSAL	------	---
WATER POLLUTION	------	---
WATER RESOURCES AND SUPPLY	------	---
ELECTROMAGNETIC GROUP	4,000	11
CIRCUITS, NETWORKS	100	---
COMMUNICATION	700	2
DIELECTRICS	------	---
ELECTRICAL APPLICATIONS	500	1
ELECTRICAL ENGINEERING	700	2
ELECTROMAGNETIC RADIATION	100	---
ELECTROMECHANICAL TECHNOLOGY	100	---
ELECTRONIC APPLICATIONS	1,000	3
INFRA-RED, RADIOMETRY	------	---
INSULATION, ELECTRICAL	------	---
MAGNETICS, MAGNETISM	------	---
NAVIGATION	100	---
PHOTOELECTRICITY	------	---
POWER, ELECTRICAL	200	---
RADIO FREQUENCY COMPATIBILITY	------	---
RECORDING	100	---
SUPERCONDUCTIVITY	------	---
TELECOMMUNICATIONS	300	1

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
DYNAMICS AND MECHANICS GROUP	2,500	7
AERODYNAMICS	100	---
ASTRODYNAMICS	100	---
ENERGY GENERATION AND CONVERSION	------	---
EXPLOSIVE EFFECTS	100	---
FLUID DYNAMICS, FLUID MECHANICS	100	---
FLUIDICS	------	---
FRICTION	------	---
GAS DYNAMICS	------	---
HIGH PRESSURE	------	---
HYDRAULICS	100	---
HYDRODYNAMICS	------	---
KINETICS	------	---
LUBRICATION	100	---
MAGNETOHYDRODYNAMICS	------	---
MASS TRANSFER	------	---
MECHANICAL APPLICATIONS, APPLIED MECHANICS	600	2
MECHANICAL ENGINEERING	1,000	3
MECHANICS	------	---
POWER, MECHANICAL	------	---
PROPULSION	100	---
VACUUM TECHNOLOGY	------	---
HEAT, LIGHT, AND APPLIED PHYSICS GROUP	1,600	4
ACOUSTICS, SONICS	------	---
APPLIED PHYSICS	200	---
ASTRONOMY AND ASTROPHYSICS	------	---
CRYOGENICS	------	---
HEAT TRANSFER	300	1
HIGH TEMPERATURE	------	---
HOLOGRAPHY	------	---
ILLUMINATION, LIGHTING	------	---
INSULATION, THERMAL	100	---
OPTICS	------	---
PHOTOGRAPHY	------	---
PHYSICS	500	1
PLASMAS	------	---
RADIO ASTRONOMY	------	---
SOLID STATE	100	---
THERMODYNAMICS	100	---
THERMOPHYSICS	------	---
ULTRASONICS	------	---
UNDERWATER ACOUSTICS	------	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
NUCLEAR GROUP	200	---
NUCLEAR ENGINEERING	100	---
NUCLEONICS	------	---
POWER, NUCLEAR	------	---
RADIATION SAFETY	------	---
RADIOACTIVITY	------	---
ENGINEERING PROCESSES AND APPLICATIONS GROUP	1,500	4
ASSEMBLY METHODS	100	---
CONTAINERIZING, PACKAGING	------	---
DRILLING	200	---
DRYING	------	---
ENGINEERING	800	2
FASTENING, JOINING	------	---
FORMING, SHAPING	100	---
MATERIAL HANDLING	200	---
MILITARY APPLICATIONS	100	---
MINIATURIZATION	------	---
PRESERVING	------	---
PROCESSES	100	---
REFINING	------	---
SIZE REDUCTION	------	---
AUTOMATION AND CONTROL GROUP	2,300	6
ADAPTIVE SYSTEMS	------	---
AUTOMATION, CYBERNETICS	100	---
CONTROL (GENERAL)	500	1
GUIDANCE, STABILITY	100	---
INSTRUMENTATION	1,400	4
MEASUREMENT, METROLOGY	200	---
SERVO-MECHANISMS	------	---
TELEMETRY	------	---
WORK MANAGEMENT AND EVALUATION GROUP	7,000	19
ARRANGEMENT	100	---
CONFIGURATION CONTROL	------	---
COST ENGINEERING	300	1
EQUIPMENT FACILITIES	------	---
FIRE PREVENTION AND PROTECTION	100	---
INDUSTRIAL ENGINEERING	1,800	5
MAINTAINABILITY, MAINTENANCE	500	1
MANUFACTURING TECHNOLOGY	500	1
MOTION AND TIME STUDY	------	---
NONDESTRUCTIVE TESTS	100	---
OPERATING PROCEDURES	100	---
OPERATIONS RESEARCH, SYSTEMS ANALYSIS	200	---
PLANT AND FACILITIES ENGINEERING	400	1
PRODUCT ENGINEERING	300	1
PRODUCTION METHODS	200	---
PRODUCTION PLANNING AND CONTROL	200	---
QUALITY ASSURANCE	200	---

GENERAL CHARACTERISTICS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

CHARACTERISTICS	NUMBER	PERCENT
GREATEST AREA OF TECHNOLOGY--CONTINUED		
QUALITY CONTROL	300	1
RADIOGRAPHY, X-RAYS	------	---
RELIABILITY	------	---
SAFETY ENGINEERING	100	---
SPECIFICATIONS, STANDARDS	100	---
SYSTEMS ENGINEERING	500	1
TESTING-ENVIRONMENTAL, OPERATIONAL	300	1
TESTING-LABORATORY	300	1
TOOLING, TOOLS	100	---
VALUE ENGINEERING	------	---
WORK METHODS AND SIMPLIFICATION	100	---
INFORMATION AND MATHEMATICS GROUP	1,600	4
COMPUTER APPLICATIONS	500	1
DATA PROCESSING	200	---
DISPLAY	------	---
DRAFTING, DRAWING, GRAPHIC TECHNOLOGY	400	1
INFORMATION RETRIEVAL	200	---
INFORMATION THEORY	------	---
LOGIC	------	---
MATHEMATICS	300	1
NEURAL NETS	------	---
REPROGRAPHY	------	---
STATISTICS	------	---
STRESS ANALYSIS	100	---
OTHER	1,600	4
NO REPORT	8,000	21
REGISTERED ENGINEERS		
YES	1,000	3
NUMBER OF STATES		
1	800	2
2	100	---
3	------	---
4	------	---
5	------	---
6	------	---
7	------	---
8	------	---
9	------	---
10 OR MORE	------	---
NO REPORT OF NUMBER OF STATES	------	---
NO	35,000	93
NO REPORT	1,500	4

NOTE - GROUPS OR PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

GEOGRAPHIC LOCATIONS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969

GEOGRAPHIC LOCATION	NUMBER	PERCENT
ALL LOCATIONS	37,500	100
NEW ENGLAND	2,600	7
CONNECTICUT	900	2
MAINE	100	---
MASSACHUSETTS	1,200	3
NEW HAMPSHIRE	100	---
RHODE ISLAND	200	---
VERMONT	100	---
MIDDLE ATLANTIC	8,000	21
NEW JERSEY	1,700	4
NEW YORK	3,800	10
PENNSYLVANIA	2,600	7
EAST NORTH CENTRAL	7,800	21
ILLINOIS	2,200	6
INDIANA	900	2
MICHIGAN	1,400	4
OHIO	2,700	7
WISCONSIN	600	2
WEST NORTH CENTRAL	2,200	6
IOWA	600	2
KANSAS	300	1
MINNESOTA	400	1
MISSOURI	700	2
NEBRASKA	100	---
NORTH DAKOTA	------	---
SOUTH DAKOTA	100	---
SOUTH ATLANTIC	4,700	12
DELAWARE	200	---
DISTRICT OF COLUMBIA	600	2
FLORIDA	1,000	3
GEORGIA	400	1
MARYLAND	1,100	3
NORTH CAROLINA	600	2
SOUTH CAROLINA	200	---
VIRGINIA	500	1
WEST VIRGINIA	200	---

GEOGRAPHIC LOCATIONS OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA IN 1969--CONTINUED

GEOGRAPHIC LOCATION--CONTINUED	NUMBER	PERCENT
EAST SOUTH CENTRAL	1,300	3
ALABAMA	400	1
KENTUCKY	300	1
MISSISSIPPI	200	---
TENNESSEE	400	1
WEST SOUTH CENTRAL	3,100	8
ARKANSAS	100	---
LOUISIANA	500	1
OKLAHOMA	400	1
TEXAS	2,100	6
MOUNTAIN	1,900	5
ARIZONA	500	1
COLORADO	500	1
IDAHO	200	---
MONTANA	100	---
NEVADA	100	---
NEW MEXICO	200	---
UTAH	200	---
WYOMING	100	---
PACIFIC	5,600	15
ALASKA	------	---
CALIFORNIA	4,700	12
HAWAII	------	---
OREGON	200	---
WASHINGTON	600	2
U.S. TERRITORIES AND POSSESSIONS	------	---
CANAL ZONE	------	---
GUAM	------	---
PUERTO RICO	------	---
VIRGIN ISLANDS	------	---
FOREIGN	200	---

NOTE - GROUPS OR PERCENTS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

NUMBER OF PROFESSIONAL SOCIETY MEMBERS NOT MEETING CRITERIA BY CURRIC

CURRICULUM OF HIGHEST DEGREE	TOTAL	HIGH		
		DOCTORATE	PROFESS-IONAL MEDICAL	PROFESS-IONAL ENGINEER-ING
ALL CURRICULA - - - - - -	37,500	2,400	100	500
AERONAUTICAL AND ASTRONAUTICAL	300	------	------	------
AGRICULTURAL - - - - - - - - -	------	------	------	------
ARCHITECHURAL - - - - - - - - -	100	------	------	------
BIOENGINEERING - - - - - - - -	------	------	------	------
CERAMIC - - - - - - - - - - -	------	------	------	------
CHEMICAL - - - - - - - - - - -	200	------	------	------
CIVIL - - - - - - - - - - - -	500	------	------	100
COMMUNICATIONS - - - - - - - -	------	------	------	------
CONSTRUCTION - - - - - - - - -	------	------	------	------
ELECTRICAL - - - - - - - - - -	800	------	------	100
ELECTRONIC - - - - - - - - - -	600	------	------	------
ENGINEERING MECHANICS - - - - -	100	------	------	------
ENGINEERING GENERAL - - - - - -	200	------	------	------
ENGINEERING PHYSICS - - - - - -	------	------	------	------
ENGINEERING SCIENCE - - - - - -	100	------	------	------
ENGINEERING TECHNOLOGY - - - -	400	------	------	------
ENVIRONMENTAL - - - - - - - - -	100	------	------	------
GEOLOGICAL - - - - - - - - - -	100	------	------	------
GEOPHYSICAL - - - - - - - - - -	------	------	------	------
INDUSTRIAL - - - - - - - - - -	100	------	------	------
MARINE - - - - - - - - - - - -	------	------	------	------
MATERIALS - - - - - - - - - - -	------	------	------	------
MECHANICAL - - - - - - - - - -	800	------	------	100
METALLURGICAL - - - - - - - - -	200	------	------	------
MINERAL - - - - - - - - - - - -	------	------	------	------
MINING - - - - - - - - - - - -	100	------	------	------
NAVAL ARCHITECTURE - - - - - -	------	------	------	------
NUCLEAR - - - - - - - - - - - -	------	------	------	------
PETROLEUM - - - - - - - - - - -	------	------	------	------
SANITARY - - - - - - - - - - -	------	------	------	------
TEXTILE - - - - - - - - - - - -	------	------	------	------
TRANSPORTATION - - - - - - - -	------	------	------	------
WELDING - - - - - - - - - - - -	------	------	------	------
OTHER ENGINEERING - - - - - - -	200	------	------	------
BUSINESS ADMINISTRATION - - - -	3,600	------	------	------
CHEMISTRY - - - - - - - - - - -	1,800	600	------	------
PHYSICS - - - - - - - - - - - -	2,400	900	------	------
OTHER NONENGINEERING - - - - -	5,300	700	100	------
NO REPORT - - - - - - - - - - -	19,400	200	------	100

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

SOURCE - NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

ONAL SOCIETY MEMBERS NOT MEETING CRITERIA BY CURRICULUM AND HIGHEST DEGREE, 1969

EGREE	TOTAL	HIGHEST DEGREE								
		DOCTORATE	PROFESS-IONAL MEDICAL	PROFESS-IONAL ENGINEER-ING	MASTER'S	BACHE-LOR'S	ASSOCI-ATE	LESS THAN ASSOCI-ATE	FOREIGN DEGREE, LEVEL UNKNOWN	NO REPORT
- - -	37,500	2,400	100	500	3,200	9,300	2,800	5,700	1,200	12,400
TICAL	300	------	------	------	------	------	200	------	100	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	100	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	200	------	------	------	------	100	------	------	100	------
- - -	500	------	------	100	------	200	------	------	100	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	800	------	------	100	------	200	300	------	200	------
- - -	600	------	------	------	------	------	600	------	100	------
- - -	100	------	------	------	------	------	100	------	------	------
- - -	200	------	------	------	------	------	200	------	100	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	100	------	------	------	------	------	100	------	------	------
- - -	400	------	------	------	------	------	400	------	------	------
- - -	100	------	------	------	------	------	100	------	------	------
- - -	100	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	100	------	------	------	------	------	100	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	800	------	------	100	------	200	200	------	200	------
- - -	200	------	------	------	------	------	100	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	100	------	------	------	------	100	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------
- - -	200	------	------	------	------	------	100	------	------	------
- - -	3,600	------	------	------	700	2,700	100	------	------	------
- - -	1,800	600	------	------	200	1,000	------	------	------	------
- - -	2,400	900	------	------	600	1,000	------	------	------	------
- - -	5,300	700	100	------	1,300	3,100	100	------	------	------
- - -	19,400	200	------	100	200	700	------	5,700	------	12,400

D TO TOTAL BECAUSE OF ROUNDING.

ER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PER

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS

GENERAL CHARACTERISTICS	TOTAL	HI			
		DOCTORATE	PROFES- SIONAL MEDICAL	PROFES- SIONAL ENGINEER	MAS
TOTAL ENGINEERS REPORTING - - - - -	308,000	24,500	100	13,200	71,
CURRICULUM OF DEGREE					
AEROSPACE - - - - - - - - - - -	13,100	1,300	------	400	4,
CHEMICAL - - - - - - - - - - -	26,600	4,200	------	700	5,
CIVIL - - - - - - - - - - - -	48,600	2,600	------	2,400	10,
ELECTRICAL - - - - - - - - - -	65,500	2,900	------	2,900	12,
GENERAL - - - - - - - - - - -	26,300	3,400	------	1,100	6,
MECHANICAL - - - - - - - - - -	58,500	2,800	------	2,900	9,
METALLURGICAL - - - - - - - -	12,800	2,500	------	700	3,
MINERAL - - - - - - - - - - -	15,400	900	------	1,600	2,
OTHER - - - - - - - - - - - -	34,300	3,900	100	400	16,
NO REPORT - - - - - - - - - -	6,800	------	------	200	
STUDENT STATUS					
FULL-TIME - - - - - - - - - -	2,900	100	------	100	1,
PART-TIME - - - - - - - - - -	11,700	100	------	200	3,
NO REPORT - - - - - - - - - -	293,400	24,300	100	12,800	66,
PROFESSIONAL IDENTIFICATION					
ENGINEER - - - - - - - - - - -	254,700	18,300	------	10,800	58,
OTHER - - - - - - - - - - - -	44,400	5,400	100	2,000	10,
NO REPORT - - - - - - - - - -	8,800	700	------	400	2,
REGISTERED ENGINEERS					
YES - - - - - - - - - - - - -	131,100	8,400	------	7,100	29,
NO - - - - - - - - - - - - - -	171,400	15,600	100	5,800	40,
NO REPORT - - - - - - - - - -	5,400	500	------	300	1,
PROFESSIONAL EMPLOYMENT STATUS					
PROFESSIONALLY EMPLOYED - - -	293,600	23,700	100	11,100	68,
SEEKING EMPLOYMENT - - - - - -	2,000	100	------	100	
NOT SEEKING EMPLOYMENT - - - -	10,700	500	------	1,900	1,
NO REPORT - - - - - - - - - -	1,600	100	------	100	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHEST DEGREE

ISTICS	TOTAL	HIGHEST DEGREE							
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
NG - - - - -	308,000	24,500	100	13,200	71,100	185,300	9,400	400	4,000
- - - - - - -	13,100	1,300	------	400	4,000	7,100	300	------	------
- - - - - - -	26,600	4,200	------	700	5,700	15,700	200	------	------
- - - - - - -	48,600	2,600	------	2,400	10,200	32,900	400	100	------
- - - - - - -	65,500	2,900	------	2,900	12,600	44,800	2,300	100	------
- - - - - - -	26,300	3,400	------	1,100	6,400	13,700	1,700	------	------
- - - - - - -	58,500	2,800	------	2,900	9,600	42,000	1,200	100	------
- - - - - - -	12,800	2,500	------	700	3,200	6,200	200	------	------
- - - - - - -	15,400	900	------	1,600	2,600	10,200	200	------	------
- - - - - - -	34,300	3,900	100	400	16,400	12,400	1,000	------	------
- - - - - - -	6,800	------	------	200	200	400	1,900	------	4,000
- - - - - - -	2,900	100	------	100	1,400	1,300	------	------	------
- - - - - - -	11,700	100	------	200	3,500	7,400	400	------	------
- - - - - - -	293,400	24,300	100	12,800	66,200	176,700	9,000	400	3,900
TION									
- - - - - - -	254,700	18,300	------	10,800	58,700	154,400	8,800	300	3,500
- - - - - - -	44,400	5,400	100	2,000	10,400	25,600	500	------	300
- - - - - - -	8,800	700	------	400	2,000	5,400	100	------	200
- - - - - - -	131,100	8,400	------	7,100	29,600	79,800	1,900	400	4,000
- - - - - - -	171,400	15,600	100	5,800	40,200	102,400	7,400	------	------
- - - - - - -	5,400	500	------	300	1,300	3,200	200	------	------
STATUS									
LOYED - - -	293,600	23,700	100	11,100	68,400	177,700	8,900	300	3,300
- - - - - - -	2,000	100	------	100	500	1,200	100	------	100
MENT - - - -	10,700	500	------	1,900	1,800	5,500	400	------	600
- - - - - - -	1,600	100	------	100	400	900	------	------	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNI

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVE

GENERAL CHARACTERISTICS	TOTAL	DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEE
PRODUCTS OR SERVICES				
AGRICULTURE AND FOOD - - - - -	4,000	400	------	100
AIRCRAFT AND SPACE - - - - - -	33,000	2,800	------	900
CERAMICS - - - - - - - - - - -	2,100	200	------	------
CHEMICALS, ALLIED PROD. - - -	19,500	2,000	------	600
COMMUNICATIONS - - - - - - - -	7,700	400	------	300
COMPUTERS - - - - - - - - - -	11,000	900	------	300
CONSTRUCTION,CIVIL ENGR. - - -	45,900	1,400	------	1,700
EDUC., INFORMATION SERV. - - -	14,600	7,300	------	400
ELECTRICAL EQUIP., SERV. - - -	19,200	500	------	900
ELECTRONIC EQUIP., SERV. - - -	23,000	1,500	------	600
LAB-SCI-PHOTO-OPT EQUIP. - - -	2,800	200	------	200
MACHINERY, MECH. EQUIP. - - -	28,400	900	------	1,100
MARINE TRANSPORTATION - - - -	4,800	200	------	200
MEDICAL, HEALTH SERVICES - - -	1,300	200	100	------
METALS, BASIC - - - - - - - -	12,600	1,700	------	600
METAL FABRICATED PROD. - - - -	6,300	200	------	200
MINING - - - - - - - - - - - -	5,900	400	------	700
MOTOR VEHICLE TRANS. - - - - -	2,500	100	------	100
ORDNANCE - - - - - - - - - - -	5,200	300	------	200
PETROLEUM - - - - - - - - - -	15,500	800	------	600
RAILWAY, RAPID TRANSIT - - - -	1,500	------	------	100
UTILITIES - - - - - - - - - -	14,700	200	------	700
OTHER PRODUCTS, SERVICES - - -	11,300	1,000	------	400
NO REPORT - - - - - - - - - -	15,200	1,000	------	2,100
AREAS OF TECHNOLOGY				
BIOMEDICAL - - - - - - - - - -	1,600	500	------	------
BEHAVIORAL AND SOCIAL - - - -	4,100	700	------	100
CHEMICAL AND MATERIALS - - - -	11,700	1,900	------	300
METALLURGICAL - - - - - - - -	12,100	2,000	------	600
EARTH,ATMOSPHERE,MARINE - - -	9,900	900	------	700
ENVIRONMENTAL,STRUCTURAL - - -	33,700	2,300	------	1,300
ELECTROMAGNETIC - - - - - - -	42,800	1,900	------	1,800
DYNAMICS AND MECHANICS - - - -	40,100	4,600	------	1,500
HEAT,LIGHT,APPL. PHYSICS - - -	8,500	1,900	------	200
NUCLEAR - - - - - - - - - - -	2,600	400	------	100
ENGR.PROCESS-APPLICATION - - -	32,100	1,600	------	1,200
AUTOMATION AND CONTROL - - - -	12,400	700	------	500
WORK MGMT,EVALUATION - - - - -	56,500	1,700	------	1,800
INFORMATION,MATHEMATICS - - -	11,500	1,200	------	300
OTHER - - - - - - - - - - - -	9,700	800	------	400
NO REPORT - - - - - - - - - -	18,700	1,300	------	2,300

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHEST DEGREE--CONTINUED

ISTICS	TOTAL	HIGHEST DEGREE							
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
DD - - - - - -	4,000	400	------	100	1,100	2,300	100	------	------
- - - - - - -	33,000	2,800	------	900	10,800	17,300	900	------	200
- - - - - - -	2,100	200	------	------	400	1,300	------	------	------
PROD. - - -	19,500	2,000	------	600	5,000	11,500	300	------	100
- - - - - - -	7,700	400	------	300	1,700	4,600	600	------	100
- - - - - - -	11,000	900	------	300	3,700	5,900	200	------	------
ENGR. - - -	45,900	1,400	------	1,700	9,600	31,000	900	100	1,000
SERV. - - -	14,600	7,300	------	400	4,900	1,900	100	------	------
SERV. - - -	19,200	500	------	900	2,800	13,700	900	------	300
SERV. - - -	23,000	1,500	------	600	6,800	12,900	1,100	------	200
EQUIP. - - -	2,800	200	------	200	700	1,500	100	------	------
QUIP. - - -	28,400	900	------	1,100	4,600	19,900	1,300	------	500
ION - - - -	4,800	200	------	200	1,200	2,800	300	------	------
RVICES - - -	1,300	200	100	------	400	600	------	------	------
- - - - - - -	12,600	1,700	------	600	2,700	7,300	300	------	------
ROD. - - - -	6,300	200	------	200	1,000	4,300	400	------	100
- - - - - - -	5,900	400	------	700	1,100	3,600	100	------	100
S. - - - - - -	2,500	100	------	100	700	1,500	100	------	------
- - - - - - -	5,200	300	------	200	1,400	3,100	200	------	------
- - - - - - -	15,500	800	------	600	2,700	11,200	200	------	100
NSIT - - - -	1,500	------	------	100	200	1,100	100	------	------
- - - - - - -	14,700	200	------	700	1,800	11,400	300	------	300
RVICES - - -	11,300	1,000	------	400	2,800	6,700	300	------	100
- - - - - - -	15,200	1,000	------	2,100	3,000	7,900	500	------	600
- - - - - - -	1,600	500	------	------	500	600	------	------	------
IAL - - - -	4,100	700	------	100	1,600	1,600	100	------	------
IALS - - - -	11,700	1,900	------	300	2,800	6,400	200	------	100
- - - - - - -	12,100	2,000	------	600	2,700	6,400	300	------	------
ARINE - - -	9,900	900	------	700	2,300	5,700	100	------	100
CTURAL - - -	33,700	2,300	------	1,300	8,400	20,400	600	100	500
- - - - - - -	42,800	1,900	------	1,800	8,800	27,800	1,900	------	700
NICS - - - -	40,100	4,600	------	1,500	9,600	22,700	1,200	100	400
HYSICS - - -	8,500	1,900	------	200	2,600	3,500	100	------	100
- - - - - - -	2,600	400	------	100	800	1,300	------	------	------
CATION - - -	32,100	1,600	------	1,200	6,500	21,300	900	100	500
TROL - - - -	12,400	700	------	500	2,700	7,900	600	------	100
ON - - - - -	56,500	1,700	------	1,800	11,900	38,000	2,400	------	700
ATICS - - -	11,500	1,200	------	300	3,900	5,900	200	------	------
- - - - - - -	9,700	800	------	400	2,400	5,800	200	------	100
- - - - - - -	18,700	1,300	------	2,300	3,600	10,200	600	------	700

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONN

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHES

GENERAL CHARACTERISTICS	TOTAL	HIGHEST			
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S
TYPE OF EMPLOYER					
PRIV.INDUSTRY,BUSINESS - - - -	211,100	10,000	------	7,700	47,000
SELF-EMPLOYED - - - - - - - - -	11,400	500	------	1,000	1,600
COLLEGE,UNIVERSITY - - - - - -	20,200	10,400	------	600	6,700
JR.COLLEGE,TECH.INST. - - - -	900	100	------	------	500
SEC.,ELEM.,OTHER SCHOOL - - -	300	------	------	------	100
NONPROFIT ORGANIZATION - - - -	5,400	800	------	300	1,900
FEDERAL GOVERNMENT - - - - - -	24,600	1,200	------	800	5,700
USPHS,MILITARY SERVICE - - - -	4,900	200	------	200	2,200
STATE GOVERNMENT - - - - - - -	5,900	100	------	200	1,000
LOCAL GOVERNMENT - - - - - - -	4,800	------	------	200	900
OTHER - - - - - - - - - - - -	4,600	200	------	200	1,000
NO REPORT - - - - - - - - - -	14,000	800	------	2,000	2,500
FUNCTIONS					
DESIGN - - - - - - - - - - - -	53,600	900	------	1,700	12,100
DEVELOPMENT - - - - - - - - -	32,300	2,100	------	900	9,800
RESEARCH - - - - - - - - - - -	22,000	6,500	------	600	7,800
PRODUCTION - - - - - - - - - -	56,600	600	------	2,400	7,800
CONTROL - - - - - - - - - - -	104,700	5,300	------	4,600	23,900
TEACHING - - - - - - - - - - -	14,700	7,600	------	400	4,700
OTHER - - - - - - - - - - - -	6,200	300	------	200	1,600
NO REPORT - - - - - - - - - -	17,900	1,200	------	2,300	3,400
SUPERVISORY LEVEL					
NO REG. SUPV. GIVEN - - - - -	52,200	4,900	------	1,900	13,400
INDIRECT OR STAFF - - - - - -	50,400	4,300	------	1,700	12,000
TEAM OR UNIT - - - - - - - - -	33,900	2,700	------	900	8,300
PROJECT OR SECTION - - - - - -	61,700	4,700	------	2,000	14,600
MAJOR DEPT.,DIV.,PROGRAM - - -	56,900	4,400	------	2,300	12,900
GEN.MGMT OF ORGANIZATION - - -	28,800	1,900	------	1,600	5,200
NO REPORT - - - - - - - - - -	24,000	1,800	------	2,700	4,700

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHEST DEGREE--CONTINUED

	TOTAL	HIGHEST DEGREE							
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
- - -	211,100	10,000	------	7,700	47,000	136,600	7,300	300	2,200
- - -	11,400	500	------	1,000	1,600	7,400	400	------	500
- - -	20,200	10,400	------	600	6,700	2,400	100	------	------
- - -	900	100	------	------	500	300	------	------	------
- - -	300	------	------	------	100	100	------	------	------
- - -	5,400	800	------	300	1,900	2,200	100	------	------
- - -	24,600	1,200	------	800	5,700	16,000	600	------	300
- - -	4,900	200	------	200	2,200	2,200	------	------	------
- - -	5,900	100	------	200	1,000	4,200	100	------	200
- - -	4,800	------	------	200	900	3,400	100	------	100
- - -	4,600	200	------	200	1,000	2,900	200	------	100
- - -	14,000	800	------	2,000	2,500	7,500	500	------	600
- - -	53,600	900	------	1,700	12,100	36,100	2,000	100	800
- - -	32,300	2,100	------	900	9,800	18,600	700	------	200
- - -	22,000	6,500	------	600	7,800	6,800	200	------	------
- - -	56,600	600	------	2,400	7,800	43,000	2,100	------	700
- - -	104,700	5,300	------	4,600	23,900	65,500	3,500	100	1,600
- - -	14,700	7,600	------	400	4,700	1,800	100	------	------
- - -	6,200	300	------	200	1,600	3,900	200	------	------
- - -	17,900	1,200	------	2,300	3,400	9,700	600	------	700
- - -	52,200	4,900	------	1,900	13,400	30,000	1,500	------	500
- - -	50,400	4,300	------	1,700	12,000	30,400	1,500	------	500
- - -	33,900	2,700	------	900	8,300	20,800	1,000	------	200
- - -	61,700	4,700	------	2,000	14,600	37,700	2,000	200	600
- - -	56,900	4,400	------	2,300	12,900	34,500	2,000	100	700
- - -	28,800	1,900	------	1,600	5,200	18,400	900	------	700
- - -	24,000	1,800	------	2,700	4,700	13,500	600	100	700

NATIONAL REGISTER OF SCIENTIFIC AND TECH

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LE

GENERAL CHARACTERISTICS	TOTAL	DOCTORATE	PROFES- SIONAL MECICAL	PROF SION ENGIN
ALL GEOGRAPHIC LOCATIONS - - - - -	308,000	24,500	100	13,2
NEW ENGLAND - - - - - - - - - -	21,800	1,800	------	9
CONNECTICUT - - - - - - - -	6,600	400	------	3
MAINE - - - - - - - - - - -	700	100	------	----
MASSACHUSETTS - - - - - - -	12,300	1,100	------	[illegible]
NEW HAMPSHIRE - - - - - - -	900	100	------	----
RHCDE ISLAND - - - - - - - -	1,00C	100	------	----
VERMONT - - - - - - - - - -	50C	------	------	----
MIDDLE ATLANTIC - - - - - - - -	66,400	5,60C	------	3,6
NEW JERSEY - - - - - - - -	14,500	1,400	------	9
NEW YORK - - - - - - - - -	29,200	2,400	------	1,9
PENNSYLVANIA - - - - - - -	22,700	1,800	------	8
EAST NORTH CENTRAL - - - - - -	52,200	3,900	------	2,7
ILLINOIS - - - - - - - - -	14,800	1,000	------	6
INDIANA - - - - - - - - - -	5,800	600	------	2
MICHIGAN - - - - - - - - -	9,200	600	------	3
OHIO - - - - - - - - - - -	17,500	1,300	------	1,1
WISCONSIN - - - - - - - - -	5,000	500	------	1
WEST NORTH CENTRAL - - - - - -	18,500	1,600	------	[illegible]
IOWA - - - - - - - - - - -	2,800	300	------	----
KANSAS - - - - - - - - - -	2,000	200	------	1
MINNESOTA - - - - - - - - -	4,600	400	------	2
MISSOURI - - - - - - - - -	7,000	600	------	2
NEBRASKA - - - - - - - - -	1,500	100	------	----
NORTH DAKOTA - - - - - - -	300	------	------	----
SOUTH DAKOTA - - - - - - -	400	------	------	----
SOUTH ATLANTIC - - - - - - - -	39,300	3,200	------	1,7
DELAWARE - - - - - - - - -	2,100	300	------	[illegible]
DISTRICT OF COLUMBIA - - -	5,9C0	500	------	[illegible]
FLORIDA - - - - - - - - - -	6,700	400	------	[illegible]
GEORGIA - - - - - - - - - -	3,1CC	200	------	[illegible]
MARYLAND - - - - - - - - -	7,600	600	------	[illegible]
NORTH CAROLINA - - - - - -	3,70C	300	------	[illegible]
SOUTH CAROLINA - - - - - -	2,000	200	------	[illegible]
VIRGINIA - - - - - - - - -	6,300	600	------	[illegible]
WEST VIRGINIA - - - - - - - -	2,000	200	------	----

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ARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHEST DEGREE--CONTINUED

ICS	TOTAL	HIGHEST DEGREE							
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
- - - - -	308,000	24,500	100	13,200	71,100	185,300	9,400	400	4,000
- - - - -	21,800	1,800	------	900	6,300	11,500	800	------	500
- - - - -	6,600	400	------	300	1,900	3,800	200	------	------
- - - - -	700	100	------	------	100	400	------	------	------
- - - - -	12,300	1,100	------	500	3,600	6,100	500	------	400
- - - - -	900	100	------	------	200	500	------	------	------
- - - - -	1,000	100	------	------	200	500	100	------	------
- - - - -	500	------	------	------	100	200	------	------	------
- - - - -	66,400	5,600	------	3,600	17,900	36,600	1,900	100	700
- - - - -	14,500	1,400	------	900	4,500	7,100	400	------	100
- - - - -	29,200	2,400	------	1,900	8,000	15,800	800	100	200
- - - - -	22,700	1,800	------	800	5,400	13,700	600	------	400
- - - - -	52,200	3,900	------	2,200	11,200	32,300	1,900	------	600
- - - - -	14,800	1,000	------	600	3,300	9,100	600	------	300
- - - - -	5,800	600	------	200	1,100	3,700	200	------	------
- - - - -	9,200	600	------	300	2,400	5,700	300	------	100
- - - - -	17,500	1,300	------	1,100	3,600	10,600	700	------	200
- - - - -	5,000	500	------	100	800	3,300	200	------	100
- - - - -	18,500	1,600	------	500	3,500	12,300	500	------	200
- - - - -	2,800	300	------	------	400	2,000	------	------	------
- - - - -	2,000	200	------	100	300	1,300	100	------	------
- - - - -	4,600	400	------	200	800	3,100	100	------	------
- - - - -	7,000	600	------	200	1,600	4,400	200	------	100
- - - - -	1,500	100	------	------	300	1,000	------	------	------
- - - - -	300	------	------	------	100	200	------	------	------
- - - - -	400	------	------	------	100	300	------	------	------
- - - - -	39,300	3,200	------	1,700	8,400	24,100	1,200	100	600
- - - - -	2,100	300	------	100	400	1,100	------	------	------
IA - - -	5,900	500	------	300	1,700	3,100	100	------	100
- - - - -	6,700	400	------	500	1,200	4,300	300	------	100
- - - - -	3,100	200	------	100	600	2,000	100	------	------
- - - - -	7,600	600	------	300	1,800	4,600	300	------	100
- - - - -	3,700	300	------	200	600	2,400	100	------	------
- - - - -	2,000	200	------	100	300	1,300	100	------	------
- - - - -	6,300	600	------	200	1,400	3,800	100	------	100
- - - - -	2,000	200	------	------	400	1,300	100	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERS

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HI

GENERAL CHARACTERISTICS	TOTAL	HIG			
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MAST
GEOGRAPHIC LOCATION, CONTINUED					
EAST SOUTH CENTRAL - - - - - -	11,900	900	------	400	2,
ALABAMA - - - - - - - - - -	4,000	300	------	100	
KENTUCKY - - - - - - - - -	1,900	100	------	100	
MISSISSIPPI - - - - - - - -	1,200	100	------	------	
TENNESSEE - - - - - - - - -	4,800	400	------	200	
WEST SOUTH CENTRAL - - - - - -	29,500	1,900	------	900	4,
ARKANSAS - - - - - - - - -	900	100	------	------	
LOUISIANA - - - - - - - - -	5,100	300	------	200	
OKLAHOMA - - - - - - - - -	4,300	400	------	100	
TEXAS - - - - - - - - - - -	19,200	1,200	------	500	3,
MOUNTAIN - - - - - - - - - - -	14,800	1,500	------	1,000	3,
ARIZONA - - - - - - - - - -	3,100	300	------	200	
COLORADO - - - - - - - - -	4,800	500	------	500	1,
IDAHO - - - - - - - - - - -	900	100	------	------	
MONTANA - - - - - - - - - -	800	100	------	------	
NEVADA - - - - - - - - - -	900	100	------	100	
NEW MEXICO - - - - - - - - -	2,000	200	------	100	
UTAH - - - - - - - - - - -	1,600	200	------	100	
WYOMING - - - - - - - - - -	500	------	------	------	
PACIFIC - - - - - - - - - - -	50,700	3,800	------	1,800	12,
ALASKA - - - - - - - - - -	600	------	------	------	
CALIFORNIA - - - - - - - - -	41,400	3,200	------	1,600	10,
HAWAII - - - - - - - - - -	1,000	100	------	------	
OREGON - - - - - - - - - -	1,700	100	------	100	
WASHINGTON - - - - - - - - -	6,000	400	------	200	1,
OUTLYING AREAS - - - - - - - -	500	100	------	------	
CANAL ZONE - - - - - - - -	------	------	------	------	---
GUAM - - - - - - - - - - -	------	------	------	------	---
PUERTO RICO - - - - - - - -	500	100	------	------	
VIRGIN ISLANDS - - - - - - -	------	------	------	------	---
FOREIGN - - - - - - - - - - - -	2,200	200	------	100	

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

TERISTICS OF ENGINEERS MEETING CRITERIA BY LEVELS OF HIGHEST DEGREE--CONTINUED

	TOTAL	HIGHEST DEGREE							
		DOCTORATE	PROFES- SIONAL MEDICAL	PROFES- SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
)									
- - -	11,900	900	------	400	2,200	8,000	300	------	200
- - -	4,000	300	------	100	700	2,800	------	------	------
- - -	1,900	100	------	100	400	1,200	100	------	------
- - -	1,200	100	------	------	100	800	100	------	------
- - -	4,800	400	------	200	900	3,200	100	------	100
- - -	29,500	1,900	------	900	4,900	20,700	700	------	400
- - -	900	100	------	------	100	600	100	------	------
- - -	5,100	300	------	200	800	3,600	100	------	100
- - -	4,300	400	------	100	700	3,000	100	------	------
- - -	19,200	1,200	------	500	3,300	13,500	400	------	200
- - -	14,800	1,500	------	1,000	3,200	8,500	400	------	200
- - -	3,100	300	------	200	700	1,800	100	------	100
- - -	4,800	500	------	500	1,200	2,600	100	------	100
- - -	900	100	------	------	200	600	------	------	------
- - -	800	100	------	------	100	600	------	------	------
- - -	900	100	------	100	200	600	------	------	------
- - -	2,000	200	------	100	500	1,100	100	------	------
- - -	1,600	200	------	100	300	900	100	------	------
- - -	500	------	------	------	100	300	------	------	------
- - -	50,700	3,800	------	1,800	12,700	29,800	1,700	100	700
- - -	600	------	------	------	100	400	------	------	------
- - -	41,400	3,200	------	1,600	10,700	23,700	1,400	100	600
- - -	1,000	100	------	------	200	700	------	------	------
- - -	1,700	100	------	100	300	1,200	------	------	------
- - -	6,000	400	------	200	1,400	3,800	200	------	100
- - -	500	100	------	------	100	300	------	------	------
- - -	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------
- - -	500	100	------	------	100	300	------	------	------
- - -	------	------	------	------	------	------	------	------	------
- - -	2,200	200	------	100	600	1,300	100	------	------

OTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL P

CHARACTERISTICS OF ENGINEERS MEETING CRITE

GENERAL CHARACTERISTICS	TOTAL	19 AND UNDER	20-24
TOTAL ENGINEERS REPORTING - - - - - - - - - - -	308,000	------	5,000
HIGHEST DEGREE			
DOCTORATE - - - - - - - - - - - - - - - - -	24,500	------	------
PROFESSIONAL MEDICAL - - - - - - - - - - -	100	------	------
PROFESSIONAL ENGINEER - - - - - - - - - -	13,200	------	200
MASTER'S - - - - - - - - - - - - - - - - -	71,100	------	700
BACHELOR'S - - - - - - - - - - - - - - - -	185,300	------	4,200
LESS THAN BACHELOR'S - - - - - - - - - - -	9,400	------	------
OTHER - - - - - - - - - - - - - - - - - -	400	------	------
NO REPORT - - - - - - - - - - - - - - - -	4,000	------	------
CURRICULUM OF DEGREE			
AEROSPACE - - - - - - - - - - - - - - - -	13,100	------	500
CHEMICAL - - - - - - - - - - - - - - - - -	26,600	------	200
CIVIL - - - - - - - - - - - - - - - - - -	48,600	------	700
ELECTRICAL - - - - - - - - - - - - - - - -	65,500	------	200
GENERAL - - - - - - - - - - - - - - - - -	26,300	------	700
MECHANICAL - - - - - - - - - - - - - - - -	58,500	------	1,100
METALLURGICAL - - - - - - - - - - - - - -	12,800	------	1,000
MINERAL - - - - - - - - - - - - - - - - -	15,400	------	500
OTHER - - - - - - - - - - - - - - - - - -	34,300	------	300
NO REPORT - - - - - - - - - - - - - - - -	6,800	------	------
STUDENT STATUS			
FULL-TIME - - - - - - - - - - - - - - - -	2,900	------	500
PART-TIME - - - - - - - - - - - - - - - -	11,700	------	900
NO REPORT - - - - - - - - - - - - - - - -	293,400	------	3,700
PROFESSIONAL IDENTIFICATION			
ENGINEER - - - - - - - - - - - - - - - - -	254,700	------	3,900
OTHER - - - - - - - - - - - - - - - - - -	44,400	------	900
NO REPORT - - - - - - - - - - - - - - - -	8,800	------	300
REGISTERED ENGINEERS			
YES - - - - - - - - - - - - - - - - - - -	131,100	------	500
NO -	171,400	------	4,400
NO REPORT - - - - - - - - - - - - - - - -	5,400	------	100
PROFESSIONAL EMPLOYMENT STATUS			
EMPLOYED FULL-TIME - - - - - - - - - - - -	289,100	------	4,400
EMPLOYED PART-TIME - - - - - - - - - - - -	4,500	------	200
UNEMPLOYED, SEEKING EMPLOY. - - - - - - -	2,000	------	100
NOT EMPLOYED, NOT SEEKING - - - - - - - -	1,900	------	300
RETIRED - - - - - - - - - - - - - - - - -	8,900	------	------
NO REPORT - - - - - - - - - - - - - - - -	1,600	------	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE

TERISTICS	TOTAL	A G E					
		19 AND UNDER	20-24	25-29	30-34	35-39	40-44
	308,000	------	5,000	31,400	43,500	44,300	50,400
	24,500	------	------	1,800	5,200	4,800	3,600
	100	------	------	------	------	------	------
R	13,200	------	200	600	900	1,000	1,200
	71,100	------	700	9,200	13,100	11,100	12,000
	185,300	------	4,200	19,600	23,800	26,500	31,900
	9,400	------	------	100	300	700	1,400
	400	------	------	------	------	------	100
	4,000	------	------	------	100	100	300
	13,100	------	500	1,600	2,000	1,900	2,200
	26,600	------	200	3,400	3,700	3,600	3,600
	48,600	------	700	6,900	7,800	7,300	7,200
	65,500	------	200	2,300	7,900	10,400	13,300
	26,300	------	700	3,300	4,200	4,100	4,200
	58,500	------	1,100	7,500	8,300	7,400	9,300
	12,800	------	1,000	1,900	1,900	1,700	1,500
	15,400	------	500	1,000	2,100	2,600	2,900
	34,300	------	300	3,300	5,400	5,100	5,800
	6,800	------	------	------	100	300	500
	2,900	------	500	1,300	500	200	100
	11,700	------	900	3,400	3,300	1,800	1,100
	293,400	------	3,700	26,700	39,600	42,300	49,200
ON							
	254,700	------	3,900	26,100	36,400	37,100	42,100
	44,400	------	900	4,200	6,000	6,000	7,000
	8,800	------	300	1,000	1,200	1,200	1,300
	131,100	------	500	5,500	13,800	15,900	22,300
	171,400	------	4,400	25,300	29,000	27,600	27,400
	5,400	------	100	600	700	700	700
STATUS							
	289,100	------	4,400	29,500	42,400	43,700	49,700
	4,500	------	200	700	400	200	200
EMPLOY.	2,000	------	100	300	300	200	200
EEKING	1,900	------	300	600	300	100	100
	8,900	------	------	------	------	------	------
	1,600	------	100	300	100	100	200

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL,

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CON

GENERAL CHARACTERISTICS	45-49	50-54	55-59	60-
TOTAL ENGINEERS REPORTING - - - - - - - - - -	48,900	31,300	21,400	14,7
HIGHEST DEGREE				
DOCTORATE - - - - - - - - - - - - - - - -	3,600	2,000	1,200	1,0
PROFESSIONAL MEDICAL - - - - - - - - - - -	------	------	------	----
PROFESSIONAL ENGINEER - - - - - - - - - -	1,600	1,300	1,600	1,7
MASTER'S - - - - - - - - - - - - - - - - -	10,500	5,900	3,900	2,3
BACHELOR'S - - - - - - - - - - - - - - - -	31,000	19,300	12,600	7,9
LESS THAN BACHELOR'S - - - - - - - - - - -	1,800	2,100	1,300	1,0
OTHER - - - - - - - - - - - - - - - - - -	100	100	100	----
NO REPORT - - - - - - - - - - - - - - - -	400	600	700	8
CURRICULUM OF DEGREE				
AEROSPACE - - - - - - - - - - - - - - - -	2,500	1,300	600	3
CHEMICAL - - - - - - - - - - - - - - - - -	4,600	3,500	2,100	8
CIVIL - - - - - - - - - - - - - - - - - -	5,600	3,400	3,400	2,6
ELECTRICAL - - - - - - - - - - - - - - - -	11,500	7,200	5,100	4,2
GENERAL - - - - - - - - - - - - - - - - -	4,200	2,300	1,400	8
MECHANICAL - - - - - - - - - - - - - - - -	10,500	5,800	3,800	2,1
METALLURGICAL - - - - - - - - - - - - - -	1,800	1,400	600	5
MINERAL - - - - - - - - - - - - - - - - -	2,000	1,600	1,100	7
OTHER - - - - - - - - - - - - - - - - - -	5,500	3,700	2,300	1,4
NO REPORT - - - - - - - - - - - - - - - -	800	1,100	1,100	1,3
STUDENT STATUS				
FULL-TIME - - - - - - - - - - - - - - - -	100	------	------	----
PART-TIME - - - - - - - - - - - - - - - -	700	300	100	----
NO REPORT - - - - - - - - - - - - - - - -	48,100	31,000	21,300	14,6
PROFESSIONAL IDENTIFICATION				
ENGINEER - - - - - - - - - - - - - - - - -	40,200	25,700	17,400	12,1
OTHER - - - - - - - - - - - - - - - - - -	7,400	4,800	3,500	2,2
NO REPORT - - - - - - - - - - - - - - - -	1,300	800	500	4
REGISTERED ENGINEERS				
YES - - - - - - - - - - - - - - - - - - -	23,700	16,400	12,600	9,5
NO -	24,500	14,300	8,500	4,9
NO REPORT - - - - - - - - - - - - - - - -	800	600	400	3
PROFESSIONAL EMPLOYMENT STATUS				
EMPLOYED FULL-TIME - - - - - - - - - - - -	48,100	30,600	20,400	12,8
EMPLOYED PART-TIME - - - - - - - - - - - -	200	200	400	4
UNEMPLOYED, SEEKING EMPLOY. - - - - - - -	300	300	200	1
NOT EMPLOYED, NOT SEEKING - - - - - - - -	100	100	100	1
RETIRED - - - - - - - - - - - - - - - - -	------	100	300	1,1
NO REPORT - - - - - - - - - - - - - - - -	200	100	100	1

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

	AGE						
CS	45-49	50-54	55-59	60-64	65-69	70 AND OVER	NO REPORT OF AGE
- - - - - - -	48,900	31,300	21,400	14,700	7,600	6,600	2,800
- - - - - - -	3,600	2,000	1,200	1,000	500	400	200
	------	------	------	------	------	------	------
- - - - - - -	1,600	1,300	1,600	1,700	1,300	1,600	100
- - - - - - -	10,500	5,900	3,900	2,300	900	800	700
- - - - - - -	31,000	19,300	12,600	7,900	3,900	3,000	1,700
- - - - - - -	1,800	2,100	1,300	1,000	400	300	------
- - - - - - -	100	100	100	------	------	------	------
- - - - - - -	400	600	700	800	500	500	100
- - - - - - -	2,500	1,300	600	300	100	100	100
- - - - - - -	4,600	3,500	2,100	800	400	300	200
- - - - - - -	5,600	3,400	3,400	2,600	1,700	1,800	400
- - - - - - -	11,500	7,200	5,100	4,200	1,900	900	600
- - - - - - -	4,200	2,300	1,400	800	400	400	300
- - - - - - -	10,500	5,800	3,800	2,100	1,100	1,200	500
- - - - - - -	1,800	1,400	600	500	200	200	100
- - - - - - -	2,000	1,600	1,100	700	400	500	100
- - - - - - -	5,500	3,700	2,300	1,400	600	400	400
- - - - - - -	800	1,100	1,100	1,300	800	800	100
- - - - - - -	100	------	------	------	------	------	100
- - - - - - -	700	300	100	------	------	------	100
- - - - - - -	48,100	31,000	21,300	14,600	7,600	6,600	2,700
- - - - - - -	40,200	25,700	17,400	12,100	6,300	5,200	2,300
- - - - - - -	7,400	4,800	3,500	2,200	1,000	1,000	400
- - - - - - -	1,300	800	500	400	300	400	100
- - - - - - -	23,700	16,400	12,600	9,500	5,400	4,400	1,200
- - - - - - -	24,500	14,300	8,500	4,900	2,000	2,000	1,600
- - - - - - -	800	600	400	300	200	200	100
- - - - - - -	48,100	30,600	20,400	12,800	3,700	1,200	2,700
- - - - - - -	200	200	400	400	700	800	------
- - - - - - -	300	300	200	100	100	100	------
- - - - - - -	100	100	100	100	100	100	------
- - - - - - -	------	100	300	1,100	3,000	4,300	100
- - - - - - -	200	100	100	100	100	100	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

CHARACTERISTICS OF ENGINEERS MEETING CRITERI

GENERAL CHARACTERISTICS	TOTAL	19 AND UNDER	20-
PRODUCTS OR SERVICES			
AGRICULTURE AND FOOD	4,000	------	---
AIRCRAFT AND SPACE	33,000	------	
CERAMICS	2,100	------	---
CHEMICALS, ALLIED PROD.	19,500	------	
COMMUNICATIONS	7,700	------	---
COMPUTERS	11,000	------	
CONSTRUCTION,CIVIL ENGR.	45,900	------	
EDUC., INFORMATION SERV.	14,600	------	
ELECTRICAL EQUIP., SERV.	19,200	------	
ELECTRONIC EQUIP., SERV.	23,000	------	
LAB-SCI-PHOTO-OPT EQUIP.	2,800	------	---
MACHINERY, MECH. EQUIP.	28,400	------	
MARINE TRANSPORTATION	4,800	------	---
MEDICAL, HEALTH SERVICES	1,300	------	
METALS, BASIC	12,600	------	
METAL FABRICATED PROD.	6,300	------	
MINING	5,900	------	
MOTOR VEHICLE TRANS.	2,500	------	---
ORDNANCE	5,200	------	
PETROLEUM	15,500	------	
RAILWAY, RAPID TRANSIT	1,500	------	---
UTILITIES	14,700	------	
OTHER PRODUCTS, SERVICES	11,300	------	
NO REPORT	15,200	------	
AREAS OF TECHNOLOGY			
BIOMEDICAL	1,600	------	--
BEHAVIORAL AND SOCIAL	4,100	------	--
CHEMICAL AND MATERIALS	11,700	------	
METALLURGICAL	12,100	------	
EARTH,ATMOSPHERE,MARINE	9,900	------	
ENVIRONMENTAL,STRUCTURAL	33,700	------	
ELECTROMAGNETIC	42,800	------	
DYNAMICS AND MECHANICS	40,100	------	
HEAT,LIGHT,APPL. PHYSICS	8,500	------	
NUCLEAR	2,600	------	--
ENGR.PROCESS-APPLICATION	32,100	------	
AUTOMATION AND CONTROL	12,400	------	
WORK MGMT,EVALUATION	56,500	------	1
INFORMATION,MATHEMATICS	11,500	------	
OTHER	9,700	------	
NO REPORT	18,700	------	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

HARACTERISTICS	TOTAL	AGE: 19 AND UNDER	20-24	25-29	30-34	35-39	40-44
FOOD - - - - - - - - - - - -	4,000	------	------	500	600	600	600
ACE - - - - - - - - - - - -	33,000	------	900	3,500	5,100	5,500	6,100
- - - - - - - - - - - - - -	2,100	------	------	200	400	300	200
ED PROD. - - - - - - - - -	19,500	------	200	3,000	2,800	2,700	2,700
- - - - - - - - - - - - - -	7,700	------	------	400	1,000	1,200	1,400
- - - - - - - - - - - - - -	11,000	------	200	1,300	2,500	2,300	2,300
VIL ENGR. - - - - - - - - -	45,900	------	500	5,900	7,500	6,800	7,400
ION SERV. - - - - - - - - -	14,600	------	100	1,000	2,200	2,300	2,000
P., SERV. - - - - - - - - -	19,200	------	100	900	1,800	2,300	3,700
P., SERV. - - - - - - - - -	23,000	------	100	1,200	3,400	4,700	5,000
PT EQUIP. - - - - - - - - -	2,800	------	------	200	400	500	500
. EQUIP. - - - - - - - - -	28,400	------	400	3,100	3,700	3,500	4,900
TATION - - - - - - - - - -	4,800	------	200	700	600	600	800
SERVICES - - - - - - - - -	1,300	------	------	200	300	200	200
- - - - - - - - - - - - - -	12,600	------	600	1,900	1,800	1,700	1,600
D PROD. - - - - - - - - - -	6,300	------	100	700	800	700	1,100
- - - - - - - - - - - - - -	5,900	------	100	400	700	700	1,000
RANS. - - - - - - - - - - -	2,500	------	------	500	400	400	300
- - - - - - - - - - - - - -	5,200	------	100	600	800	900	800
- - - - - - - - - - - - - -	15,500	------	300	1,500	2,100	2,400	2,900
TRANSIT - - - - - - - - - -	1,500	------	------	100	200	200	200
- - - - - - - - - - - - - -	14,700	------	100	1,100	1,600	1,700	2,500
SERVICES - - - - - - - - -	11,300	------	100	1,300	1,800	1,700	1,800
- - - - - - - - - - - - - -	15,200	------	500	1,300	900	600	600
- - - - - - - - - - - - - -	1,600	------	------	200	300	300	200
SOCIAL - - - - - - - - - -	4,100	------	------	300	600	600	600
TERIALS - - - - - - - - - -	11,700	------	200	1,500	1,800	1,300	1,600
- - - - - - - - - - - - - -	12,100	------	600	1,800	1,700	1,700	1,500
E,MARINE - - - - - - - - -	9,900	------	300	700	1,300	1,400	1,600
TRUCTURAL - - - - - - - - -	33,700	------	400	4,300	5,400	5,100	5,500
- - - - - - - - - - - - -	42,800	------	200	1,800	4,800	6,400	8,300
CHANICS - - - - - - - - - -	40,100	------	700	5,000	6,500	5,700	6,300
. PHYSICS - - - - - - - - -	8,500	------	200	800	1,600	1,200	1,600
- - - - - - - - - - - - - -	2,600	------	------	300	300	500	500
PLICATION - - - - - - - - -	32,100	------	400	3,400	4,200	4,500	5,400
CONTROL - - - - - - - - - -	12,400	------	100	900	1,900	2,000	2,800
JATION - - - - - - - - - - -	56,500	------	1,000	6,400	8,200	8,800	9,900
HEMATICS - - - - - - - - -	11,500	------	200	1,600	2,500	2,200	1,900
- - - - - - - - - - - - - -	9,700	------	100	1,000	1,300	1,500	1,500
- - - - - - - - - - - - - -	18,700	------	500	1,400	1,200	1,000	1,200

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONN

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--

GENERAL CHARACTERISTICS	45-49	50-54	55-59
PRODUCTS OR SERVICES			
AGRICULTURE AND FOOD	500	500	400
AIRCRAFT AND SPACE	6,000	3,300	1,600
CERAMICS	400	200	100
CHEMICALS, ALLIED PROD.	3,500	2,500	1,300
COMMUNICATIONS	1,400	900	600
COMPUTERS	1,400	600	300
CONSTRUCTION,CIVIL ENGR.	6,200	3,500	3,400
EDUC., INFORMATION SERV.	2,500	1,700	1,200
ELECTRICAL EQUIP., SERV.	3,700	2,600	1,800
ELECTRONIC EQUIP., SERV.	4,100	2,300	1,200
LAB-SCI-PHOTO-OPT EQUIP.	400	300	200
MACHINERY, MECH. EQUIP.	4,700	3,400	2,200
MARINE TRANSPORTATION	600	500	300
MEDICAL, HEALTH SERVICES	200	100	------
METALS, BASIC	2,000	1,400	1,000
METAL FABRICATED PROD.	1,200	700	500
MINING	800	800	600
MOTOR VEHICLE TRANS.	300	200	200
ORDNANCE	900	500	300
PETROLEUM	2,700	1,700	1,000
RAILWAY, RAPID TRANSIT	200	200	200
UTILITIES	2,600	1,700	1,400
OTHER PRODUCTS, SERVICES	1,900	1,000	800
NO REPORT	700	600	700
AREAS OF TECHNOLOGY			
BIOMEDICAL	300	100	100
BEHAVIORAL AND SOCIAL	700	400	500
CHEMICAL AND MATERIALS	1,900	1,600	900
METALLURGICAL	1,800	1,200	900
EARTH,ATMOSPHERE,MARINE	1,500	1,100	900
ENVIRONMENTAL,STRUCTURAL	4,500	2,600	2,500
ELECTROMAGNETIC	8,100	5,300	3,600
DYNAMICS AND MECHANICS	6,900	4,100	2,400
HEAT,LIGHT,APPL. PHYSICS	1,200	900	400
NUCLEAR	400	200	100
ENGR.PROCESS-APPLICATION	5,400	3,500	2,600
AUTOMATION AND CONTROL	2,000	1,300	800
WORK MGMT,EVALUATION	9,800	6,000	3,500
INFORMATION,MATHEMATICS	1,400	700	500
OTHER	1,700	1,000	700
NO REPORT	1,400	1,100	1,000

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

	A G E						
S	45-49	50-54	55-59	60-64	65-69	70 AND OVER	NO REPORT OF AGE
- - - - - - -	500	500	400	200	100	------	100
- - - - - - -	6,000	3,300	1,600	700	100	------	300
- - - - - - -	400	200	100	100	------	------	------
- - - - - - -	3,500	2,500	1,300	500	100	------	200
- - - - - - -	1,400	900	600	600	100	------	100
- - - - - - -	1,400	600	300	100	------	------	100
- - - - - - -	6,200	3,500	3,400	2,400	1,000	700	500
- - - - - - -	2,500	1,700	1,200	1,000	400	200	100
- - - - - - -	3,700	2,600	1,800	1,500	500	100	200
- - - - - - -	4,100	2,300	1,200	600	100	------	200
- - - - - - -	400	300	200	200	100	------	------
- - - - - - -	4,700	3,400	2,200	1,400	500	300	300
- - - - - - -	600	500	300	200	100	100	100
- - - - - - -	200	100	------	------	------	------	------
- - - - - - -	2,000	1,400	1,000	500	200	100	100
- - - - - - -	1,200	700	500	300	100	------	100
- - - - - - -	800	800	600	300	200	100	100
- - - - - - -	300	200	200	100	------	------	------
- - - - - - -	900	500	300	100	------	------	------
- - - - - - -	2,700	1,700	1,000	500	100	100	100
- - - - - - -	200	200	200	100	------	------	------
- - - - - - -	2,600	1,700	1,400	1,300	400	100	200
- - - - - - -	1,900	1,000	800	500	100	100	100
- - - - - - -	700	600	700	1,500	3,200	4,500	200
- - - - - - -	300	100	100	100	------	------	------
- - - - - - -	700	400	500	300	100	------	------
- - - - - - -	1,900	1,600	900	500	200	100	100
- - - - - - -	1,800	1,200	900	600	200	------	100
- - - - - - -	1,500	1,100	900	500	300	100	100
- - - - - - -	4,500	2,600	2,500	1,700	700	500	300
- - - - - - -	8,100	5,300	3,600	3,000	800	200	400
- - - - - - -	6,900	4,100	2,400	1,200	500	300	300
- - - - - - -	1,200	900	400	300	200	------	100
- - - - - - -	400	200	100	100	------	------	------
- - - - - - -	5,400	3,500	2,600	1,600	500	300	300
- - - - - - -	2,000	1,300	800	500	100	------	100
- - - - - - -	9,800	6,000	3,500	1,800	500	100	500
- - - - - - -	1,400	700	500	200	100	100	100
- - - - - - -	1,700	1,000	700	500	100	100	100
- - - - - - -	1,400	1,100	1,000	1,800	3,300	4,500	200

NATIONAL REGISTER OF SCIENTIFIC AND TE

CHARACTERISTICS OF ENGINEERS MEETING CR

GENERAL CHARACTERISTICS	TOTAL	19 AND UNDER
TYPE OF EMPLOYER		
PRIV.INDUSTRY,BUSINESS	211,100	--- -
SELF-EMPLOYED	11,400	------
COLLEGE,UNIVERSITY	2C,200	------
JR.COLLEGE,TECH.INST.	900	------
SEC.,ELEM.,CTHER SCHOOL	300	------
NONPROFIT CRGANIZATION	5,400	------
FEDERAL GOVERNMENT	24,600	------
USPHS,MILITARY SERVICE	4,900	------
STATE GOVERNMENT	5,900	------
LOCAL GOVERNMENT	4,800	------
OTHER	4,600	------
NO REPORT	14,000	------
FUNCTIONS		
DESIGN	53,600	------
DEVELOPMENT	32,300	------
RESEARCH	22,000	------
PRODUCTION	56,6C0	------
CONTRCL	1C4,700	------
TEACHING	14,700	------
OTHER	6,200	------
NO REPORT	17,900	------
SUPERVISORY LEVEL		
NO REG. SUPV. GIVEN	52,200	------
INDIRECT OR STAFF	5C,400	------
TEAM OR UNIT	33,900	------
PROJECT OR SECTION	61,700	------
MAJOR DEPT.,DIV.,PROGRAM	56,900	------
GEN.MGMT CF ORGANIZATION	28,800	------
NO REPORT	24,000	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

HARACTERISTICS	TOTAL	AGE 19 AND UNDER	20-24	25-29	30-34	35-39	40-44
USINESS - - - - - - - - - -	211,100	------	3,100	21,500	30,300	32,200	38,20C
- - - - - - - - - - - - - -	11,40C	------	------	300	700	1,200	2,00C
ITY - - - - - - - - - - -	2C,200	------	300	2,000	3,500	3,400	2,700
.INST. - - - - - - - - - -	900	------	------	100	100	1C0	10C
R SCHOOL - - - - - - - - -	300	------	------	------	------	------	------
IZATION - - - - - - - - - -	5,400	------	------	300	800	8C0	1,00C
ENT - - - - - - - - - - - -	24,600	------	400	2,40C	4,000	3,400	3,400
SERVICE - - - - - - - - - -	4,900	------	60C	1,700	800	600	50C
T - - - - - - - - - - - - -	5,900	------	100	1,000	1,100	900	80C
T - - - - - - - - - - - - -	4,800	------	------	500	900	700	7CC
- - - - - - - - - - - - - -	4,600	------	100	600	600	600	60C
- - - - - - - - - - - - - -	14,000	------	400	1,100	700	400	40C
- - - - - - - - - - - - - -	53,600	------	1,000	7,000	8,800	8,500	9,20C
- - - - - - - - - - - - - -	32,300	------	700	4,600	5,900	5,700	5,30C
- - - - - - - - - - - - - -	22,000	------	500	3,500	4,800	3,500	3,00C
- - - - - - - - - - - - - -	56,6C0	------	1,100	6,200	7,700	8,200	10,10C
- - - - - - - - - - - - - -	1C4,700	------	900	6,80C	11,800	14,200	19,00C
- - - - - - - - - - - - - -	14,700	------	100	1,100	2,500	2,500	2,00C
- - - - - - - - - - - - - -	6,200	------	200	800	800	800	900
- - - - - - - - - - - - - -	17,900	------	500	1,300	1,100	900	1,00C
GIVEN - - - - - - - - - - -	52,200	------	2,400	11,100	9,300	6,800	5,80C
AFF - - - - - - - - - - - -	5C,400	------	900	7,300	8,700	7,600	7,60C
- - - - - - - - - - - - - -	33,900	------	500	3,900	6,700	6,400	5,80C
TION - - - - - - - - - - -	61,700	------	500	5,200	10,300	11,100	11,60C
V.,PROGRAM - - - - - - - - -	56,900	------	100	1,400	4,800	7,700	12,20C
GANIZATION - - - - - - - - -	28,800	------	------	500	1,600	2,900	5,70C
- - - - - - - - - - - - - -	24,000	------	600	1,900	1,900	1,700	1,80C

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CO

GENERAL CHARACTERISTICS	45-49	50-54	55-59	60-
TYPE OF EMPLOYER				
PRIV.INDUSTRY,BUSINESS - - - - - - - - - -	35,800	22,400	14,200	8,
SELF-EMPLOYED - - - - - - - - - - -	1,900	1,400	1,100	1,
COLLEGE,UNIVERSITY - - - - - - - - - - -	3,100	2,000	1,400	1,
JR.COLLEGE,TECH.INST. - - - - - - - - - -	200	200	100	[illegible]
SEC.,ELEM.,OTHER SCHOOL - - - - - - - - -	------	------	100	---
NONPROFIT ORGANIZATION - - - - - - - - - -	1,100	500	400	[illegible]
FEDERAL GOVERNMENT - - - - - - - - - - -	3,800	2,800	2,200	1,
USPHS,MILITARY SERVICE - - - - - - - - - -	400	100	------	---
STATE GOVERNMENT - - - - - - - - - - - -	600	400	500	[illegible]
LOCAL GOVERNMENT - - - - - - - - - - - -	700	400	300	[illegible]
OTHER - - - - - - - - - - - - - - - -	700	400	400	[illegible]
NO REPORT - - - - - - - - - - - - - - -	600	500	700	1,
FUNCTIONS				
DESIGN - - - - - - - - - - - - - - - - -	7,800	4,800	3,200	1,
DEVELOPMENT - - - - - - - - - - - - - -	4,500	2,700	1,500	[illegible]
RESEARCH - - - - - - - - - - - - - - - -	3,000	1,500	1,100	[illegible]
PRODUCTION - - - - - - - - - - - - - - -	9,000	6,100	4,200	2,
CONTROL - - - - - - - - - - - - - - - -	19,900	12,900	8,800	5,
TEACHING - - - - - - - - - - - - - - - -	2,400	1,600	1,100	[illegible]
OTHER - - - - - - - - - - - - - - - - -	1,000	600	500	[illegible]
NO REPORT - - - - - - - - - - - - - - -	1,200	1,000	1,000	1,
SUPERVISORY LEVEL				
NO REG. SUPV. GIVEN - - - - - - - - - - -	5,700	3,900	2,800	2,
INDIRECT OR STAFF - - - - - - - - - - - -	7,000	4,800	3,300	2,
TEAM OR UNIT - - - - - - - - - - - - - -	5,000	2,600	1,600	1,
PROJECT OR SECTION - - - - - - - - - - -	10,000	5,800	3,800	2,
MAJOR DEPT.,DIV.,PROGRAM - - - - - - - - -	12,700	8,000	5,300	3,
GEN.MGMT OF ORGANIZATION - - - - - - - - -	5,300	4,600	3,100	2,
NO REPORT - - - - - - - - - - - - - - -	2,300	1,500	1,600	2,

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

CS	AGE 45-49	50-54	55-59	60-64	65-69	70 AND OVER	NO REPORT OF AGE
- - - - - - - -	35,800	22,400	14,200	8,300	2,200	900	2,000
- - - - - - - -	1,900	1,400	1,100	1,000	900	800	100
- - - - - - - -	3,100	2,000	1,400	1,100	400	100	100
- - - - - - - -	200	200	100	100	------	------	------
- - - - - - - -	------	------	100	------	------	------	------
- - - - - - - -	1,100	500	400	300	100	100	------
- - - - - - - -	3,800	2,800	2,200	1,400	400	100	200
- - - - - - - -	400	100	------	------	------	------	------
- - - - - - - -	600	400	500	400	100	100	100
- - - - - - - -	700	400	300	300	100	------	100
- - - - - - - -	700	400	400	300	100	100	100
- - - - - - - -	600	500	700	1,400	3,200	4,500	100
- - - - - - - -	7,800	4,800	3,200	1,800	700	300	500
- - - - - - - -	4,500	2,700	1,500	800	100	------	300
- - - - - - - -	3,000	1,500	1,100	800	100	100	200
- - - - - - - -	9,000	6,100	4,200	2,400	700	300	500
- - - - - - - -	19,900	12,900	8,800	5,800	2,200	1,300	1,000
- - - - - - - -	2,400	1,600	1,100	900	300	100	100
- - - - - - - -	1,000	600	500	400	100	------	------
- - - - - - - -	1,200	1,000	1,000	1,800	3,300	4,500	200
- - - - - - - -	5,700	3,900	2,800	2,200	1,100	600	600
- - - - - - - -	7,000	4,800	3,300	2,000	500	200	400
- - - - - - - -	5,000	2,600	1,600	1,000	200	------	300
- - - - - - - -	10,000	5,800	3,800	2,200	500	200	600
- - - - - - - -	12,700	8,000	5,300	3,200	700	200	500
- - - - - - - -	6,300	4,600	3,100	2,100	1,000	700	200
- - - - - - - -	2,300	1,500	1,600	2,100	3,600	4,700	200

NATIONAL REGISTER OF SCIENTIFIC AND TE

CHARACTERISTICS OF ENGINEERS MEETING CR

GENERAL CHARACTERISTICS	TOTAL	19 AND UNDER
ALL GEOGRAPHIC LOCATIONS	308,000	------
NEW ENGLAND	21,800	------
CONNECTICUT	6,600	------
MAINE	700	------
MASSACHUSETTS	12,300	------
NEW HAMPSHIRE	900	------
RHODE ISLAND	1,000	------
VERMONT	500	------
MIDDLE ATLANTIC	66,400	------
NEW JERSEY	14,500	------
NEW YORK	29,200	------
PENNSYLVANIA	22,700	------
EAST NORTH CENTRAL	52,200	------
ILLINOIS	14,800	------
INDIANA	5,800	------
MICHIGAN	9,200	------
OHIO	17,500	------
WISCONSIN	5,000	------
WEST NORTH CENTRAL	18,500	------
IOWA	2,800	------
KANSAS	2,000	------
MINNESOTA	4,600	------
MISSOURI	7,000	------
NEBRASKA	1,500	------
NORTH DAKOTA	300	------
SOUTH DAKOTA	400	------
SOUTH ATLANTIC	39,300	------
DELAWARE	2,100	------
DISTRICT OF COLUMBIA	5,900	------
FLORIDA	6,700	------
GEORGIA	3,100	------
MARYLAND	7,600	------
NORTH CAROLINA	3,700	------
SOUTH CAROLINA	2,000	------
VIRGINIA	6,300	------
WEST VIRGINIA	2,000	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

ACTERISTICS	TOTAL	AGE: 19 AND UNDER	20-24	25-29	30-34	35-39	40-44
S - - - - - - - - - - -	308,000	------	5,000	31,400	43,500	44,300	50,400
- - - - - - - - - - - - -	21,800	------	500	2,300	3,100	3,100	3,300
- - - - - - - - - - - - -	6,600	------	200	800	900	900	1,000
- - - - - - - - - - - - -	700	------	------	100	100	100	100
- - - - - - - - - - - - -	12,300	------	200	1,100	1,800	1,700	1,900
- - - - - - - - - - - - -	900	------	------	100	100	100	100
- - - - - - - - - - - - -	1,000	------	------	100	100	100	200
- - - - - - - - - - - - -	500	------	------	------	100	100	------
- - - - - - - - - - - - -	66,400	------	1,200	6,300	8,500	8,700	11,500
- - - - - - - - - - - - -	14,500	------	200	1,400	2,000	2,000	2,400
- - - - - - - - - - - - -	29,200	------	600	2,400	3,500	3,800	5,100
- - - - - - - - - - - - -	22,700	------	400	2,400	2,900	2,900	4,000
- - - - - - - - - - - - -	52,200	------	900	6,000	7,300	6,900	8,400
- - - - - - - - - - - - -	14,800	------	300	1,700	2,100	1,800	2,300
- - - - - - - - - - - - -	5,800	------	100	600	1,000	900	800
- - - - - - - - - - - - -	9,200	------	200	1,000	1,200	1,300	1,500
- - - - - - - - - - - - -	17,500	------	300	2,100	2,300	2,300	2,800
- - - - - - - - - - - - -	5,000	------	------	500	700	700	900
- - - - - - - - - - - - -	18,500	------	300	2,100	3,000	3,200	2,900
- - - - - - - - - - - - -	2,800	------	------	400	500	600	400
- - - - - - - - - - - - -	2,000	------	------	200	200	300	400
- - - - - - - - - - - - -	4,600	------	100	500	700	900	800
- - - - - - - - - - - - -	7,000	------	100	700	1,200	1,100	1,000
- - - - - - - - - - - - -	1,500	------	------	200	300	200	200
- - - - - - - - - - - - -	300	------	------	------	100	------	100
- - - - - - - - - - - - -	400	------	------	------	100	100	100
- - - - - - - - - - - - -	39,300	------	700	4,100	5,500	5,400	5,800
- - - - - - - - - - - - -	2,100	------	------	200	200	300	300
UMBIA - - - - - - - - -	5,900	------	------	300	700	800	700
- - - - - - - - - - - - -	6,700	------	200	600	800	1,000	1,000
- - - - - - - - - - - - -	3,100	------	100	400	600	400	500
- - - - - - - - - - - - -	7,600	------	100	800	1,000	1,000	1,200
- - - - - - - - - - - - -	3,700	------	------	500	600	600	600
- - - - - - - - - - - - -	2,000	------	------	300	400	200	300
- - - - - - - - - - - - -	6,300	------	100	700	1,000	800	900
- - - - - - - - - - - - -	2,000	------	------	200	300	300	300

NATIONAL REGISTER OF SCIENTIFIC AND TECHNI

CHARACTERISTICS OF ENGINEERS MEETING CRITER

GENERAL CHARACTERISTICS	45-49	50-54	55
ALL GEOGRAPHIC LOCATIONS - - - - - - - - - - -	48,900	31,300	21,
NEW ENGLAND - - - - - - - - - - - - - - -	3,300	2,200	1,
CONNECTICUT - - - - - - - - - - - - -	900	800	
MAINE - - - - - - - - - - - - - - - -	100	------	
MASSACHUSETTS - - - - - - - - - - - -	2,000	1,200	
NEW HAMPSHIRE - - - - - - - - - - - -	100	100	
RHODE ISLAND - - - - - - - - - - - -	100	100	
VERMONT - - - - - - - - - - - - - - -	100	------	---
MIDDLE ATLANTIC - - - - - - - - - - - - -	10,700	7,100	4,
NEW JERSEY - - - - - - - - - - - - -	2,300	1,500	1,
NEW YORK - - - - - - - - - - - - - -	4,900	3,100	2,
PENNSYLVANIA - - - - - - - - - - - -	3,500	2,500	1,
EAST NORTH CENTRAL - - - - - - - - - - -	8,300	5,500	3,
ILLINOIS - - - - - - - - - - - - - -	2,100	1,600	1,
INDIANA - - - - - - - - - - - - - - -	900	600	
MICHIGAN - - - - - - - - - - - - - -	1,500	900	
OHIO - - - - - - - - - - - - - - - -	3,000	1,900	1,
WISCONSIN - - - - - - - - - - - - - -	800	600	
WEST NORTH CENTRAL - - - - - - - - - - -	2,800	1,500	
IOWA - - - - - - - - - - - - - - - -	400	200	
KANSAS - - - - - - - - - - - - - - -	300	200	
MINNESOTA - - - - - - - - - - - - - -	700	300	
MISSOURI - - - - - - - - - - - - - -	1,100	700	
NEBRASKA - - - - - - - - - - - - - -	200	100	
NORTH DAKOTA - - - - - - - - - - - -	------	------	---
SOUTH DAKOTA - - - - - - - - - - - -	------	------	---
SOUTH ATLANTIC - - - - - - - - - - - - -	6,200	4,100	3,
DELAWARE - - - - - - - - - - - - - -	400	300	
DISTRICT OF COLUMBIA - - - - - - - - -	1,100	700	
FLORIDA - - - - - - - - - - - - - - -	1,000	700	
GEORGIA - - - - - - - - - - - - - - -	400	300	
MARYLAND - - - - - - - - - - - - - -	1,300	800	
NORTH CAROLINA - - - - - - - - - - -	500	300	
SOUTH CAROLINA - - - - - - - - - - -	300	200	
VIRGINIA - - - - - - - - - - - - - -	900	600	
WEST VIRGINIA - - - - - - - - - - - -	300	300	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

...ERISTICS	AGE 45-49	50-54	55-59	60-64	65-69	70 AND OVER	NO REPORT OF AGE
- - - - - - - - - - - -	48,900	31,300	21,400	14,700	7,600	6,600	2,800
- - - - - - - - - - - -	3,300	2,200	1,500	1,100	700	600	200
- - - - - - - - - - - -	900	800	400	300	200	200	100
- - - - - - - - - - - -	100	------	100	------	------	------	------
- - - - - - - - - - - -	2,000	1,200	900	700	300	300	100
- - - - - - - - - - - -	100	100	100	100	------	100	------
- - - - - - - - - - - -	100	100	100	------	------	------	------
- - - - - - - - - - - -	100	------	------	------	------	------	------
- - - - - - - - - - - -	10,700	7,100	4,900	3,500	1,800	1,700	700
- - - - - - - - - - - -	2,300	1,500	1,100	700	400	400	100
- - - - - - - - - - - -	4,900	3,100	2,200	1,700	800	800	300
- - - - - - - - - - - -	3,500	2,500	1,600	1,200	600	500	300
- - - - - - - - - - - -	8,300	5,500	3,800	2,400	1,300	1,000	400
- - - - - - - - - - - -	2,100	1,600	1,200	900	400	300	100
- - - - - - - - - - - -	900	600	300	200	200	100	100
- - - - - - - - - - - -	1,500	900	700	400	200	200	100
- - - - - - - - - - - -	3,000	1,900	1,200	800	400	300	100
- - - - - - - - - - - -	800	600	300	200	100	100	------
- - - - - - - - - - - -	2,800	1,500	900	800	400	400	200
- - - - - - - - - - - -	400	200	100	100	100	------	------
- - - - - - - - - - - -	300	200	100	200	------	------	------
- - - - - - - - - - - -	700	300	200	200	100	100	------
- - - - - - - - - - - -	1,100	700	400	300	200	200	100
- - - - - - - - - - - -	200	100	100	100	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	6,200	4,100	3,000	2,000	1,200	1,100	300
- - - - - - - - - - - -	400	300	200	100	------	------	------
...BIA - - - - - - - - - -	1,100	700	700	400	200	100	------
- - - - - - - - - - - -	1,000	700	400	400	300	400	------
- - - - - - - - - - - -	400	300	200	100	100	100	------
- - - - - - - - - - - -	1,300	800	600	300	200	200	100
- - - - - - - - - - - -	500	300	200	200	100	100	------
- - - - - - - - - - - -	300	200	100	100	100	100	------
- - - - - - - - - - - -	900	600	400	300	200	200	100
- - - - - - - - - - - -	300	300	200	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND T

CHARACTERISTICS OF ENGINEERS MEETING C

GENERAL CHARACTERISTICS	TOTAL	19 AND UNDER
GEOGRAPHIC LOCATION, CONTINUED		
EAST SOUTH CENTRAL	11,900	------
ALABAMA	4,000	------
KENTUCKY	1,900	------
MISSISSIPPI	1,200	------
TENNESSEE	4,800	------
WEST SOUTH CENTRAL	29,500	------
ARKANSAS	900	------
LOUISIANA	5,100	------
OKLAHOMA	4,300	------
TEXAS	19,200	------
MOUNTAIN	14,800	------
ARIZONA	3,100	------
COLORADO	4,800	------
IDAHO	900	------
MONTANA	800	------
NEVADA	900	------
NEW MEXICO	2,000	------
UTAH	1,600	------
WYOMING	500	------
PACIFIC	50,700	------
ALASKA	600	------
CALIFORNIA	41,400	------
HAWAII	1,000	------
OREGON	1,700	------
WASHINGTON	6,000	------
OUTLYING AREAS	500	------
CANAL ZONE	------	------
GUAM	------	------
PUERTO RICO	500	------
VIRGIN ISLANDS	------	------
FOREIGN	2,200	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY AGE--CONTINUED

ISTICS	TOTAL	AGE 19 AND UNDER	20-24	25-29	30-34	35-39	40-44
UED							
- - - - - - - - - -	11,900	------	200	1,500	1,800	1,900	1,800
- - - - - - - - - -	4,000	------	------	300	600	700	700
- - - - - - - - - -	1,900	------	------	300	300	300	300
- - - - - - - - - -	1,200	------	------	200	300	100	200
- - - - - - - - - -	4,800	------	100	700	600	700	700
- - - - - - - - - -	29,500	------	500	2,900	4,300	4,700	5,400
- - - - - - - - - -	900	------	------	100	100	100	100
- - - - - - - - - -	5,100	------	200	600	800	900	800
- - - - - - - - - -	4,300	------	------	300	600	600	900
- - - - - - - - - -	19,200	------	300	1,800	2,800	3,100	3,700
- - - - - - - - - -	14,800	------	200	1,500	2,000	2,400	2,300
- - - - - - - - - -	3,100	------	------	200	500	500	500
- - - - - - - - - -	4,800	------	100	500	600	800	700
- - - - - - - - - -	900	------	------	100	100	200	200
- - - - - - - - - -	800	------	------	100	100	100	100
- - - - - - - - - -	900	------	------	100	100	200	200
- - - - - - - - - -	2,000	------	------	300	300	300	400
- - - - - - - - - -	1,600	------	------	200	200	200	300
- - - - - - - - - -	500	------	------	100	100	100	100
- - - - - - - - - -	50,700	------	500	4,100	7,500	7,700	8,600
- - - - - - - - - -	600	------	------	100	100	100	100
- - - - - - - - - -	41,400	------	400	3,200	6,000	6,300	7,200
- - - - - - - - - -	1,000	------	------	100	200	100	200
- - - - - - - - - -	1,700	------	------	100	300	300	200
- - - - - - - - - -	6,000	------	------	600	1,000	900	900
- - - - - - - - - -	500	------	------	100	100	100	100
- - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - -	500	------	------	100	100	100	100
- - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - -	2,200	------	100	500	400	300	400

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PE

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY

GENERAL CHARACTERISTICS	45-49	50-54	55-59
GEOGRAPHIC LOCATION, CONTINUED			
EAST SOUTH CENTRAL	1,700	1,000	800
ALABAMA	700	300	300
KENTUCKY	200	200	100
MISSISSIPPI	100	100	100
TENNESSEE	700	500	400
WEST SOUTH CENTRAL	4,800	2,700	1,800
ARKANSAS	200	100	------
LOUISIANA	700	500	300
OKLAHOMA	700	500	300
TEXAS	3,200	1,700	1,300
MOUNTAIN	2,100	1,300	1,100
ARIZONA	500	300	200
COLORADO	800	500	400
IDAHO	100	100	100
MONTANA	100	------	------
NEVADA	100	100	100
NEW MEXICO	300	200	200
UTAH	200	200	200
WYOMING	100	------	------
PACIFIC	8,700	5,700	3,300
ALASKA	100	100	100
CALIFORNIA	7,300	4,700	2,600
HAWAII	100	100	------
OREGON	300	200	200
WASHINGTON	1,000	600	400
OUTLYING AREAS	100	100	------
CANAL ZONE	------	------	------
GUAM	------	------	------
PUERTO RICO	100	100	------
VIRGIN ISLANDS	------	------	------
FOREIGN	300	200	100

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

TIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

RACTERISTICS OF ENGINEERS MEETING CRITER A BY AGE--CONTINUED

	A G E						
	45-49	50-54	55-59	60-64	65-69	70 AND OVER	NO REPORT OF AGE
- - - -	1,700	1,000	800	600	300	200	100
- - - -	700	300	300	200	100	100	------
- - - -	200	200	100	100	------	------	------
- - - -	100	100	100	100	------	------	------
- - - -	700	500	400	200	200	100	------
- - - -	4,800	2,700	1,800	1,100	700	300	30C
- - - -	200	100	------	100	100	------	------
- - - -	700	500	300	100	100	100	------
- - - -	700	500	300	200	100	100	100
- - - -	3,200	1,700	1,300	700	400	200	10C
- - - -	2,100	1,300	1,100	800	400	400	20C
- - - -	500	300	200	20C	100	100	10C
- - - -	800	500	400	200	100	200	------
- - - -	100	100	100	------	------	------	------
- - - -	100	------	------	100	------	------	------
- - - -	100	100	100	------	------	------	------
- - - -	300	200	200	100	------	------	------
- - - -	200	200	200	100	------	------	------
- - - -	100	------	------	------	------	------	------
- - - -	8,700	5,700	3,300	2,300	900	900	500
- - - -	100	100	100	------	------	------	------
- - - -	7,300	4,700	2,600	1,900	600	800	40C
- - - -	100	100	------	------	------	------	------
- - - -	300	200	200	100	------	------	------
- - - -	1,000	600	400	300	200	100	10C
- - - -	100	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------
- - - -	100	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------
- - - -	300	200	100	------	------	------	------

CAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PE

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRO

P

GENERAL CHARACTERISTICS	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS
TOTAL ENGINEERS REPORTING	308,000	4,000	33,000	2,100
STUDENT STATUS				
FULL-TIME	2,900	------	100	------
PART-TIME	11,700	100	2,200	------
NO REPORT	293,400	3,900	30,700	2,000
PROFESSIONAL IDENTIFICATION				
ENGINEER	254,700	3,300	29,000	1,500
OTHER	44,400	600	3,200	500
NO REPORT	8,800	100	800	100
REGISTERED ENGINEERS				
YES	131,100	1,600	8,100	800
NO	171,400	2,300	24,300	1,300
NO REPORT	5,400	100	500	------
PROFESSIONAL EMPLOYMENT STATUS				
PROFESSIONALLY EMPLOYED	293,600	4,000	32,900	2,100
SEEKING EMPLOYMENT	2,000	------	------	------
NOT SEEKING EMPLOYMENT	10,700	------	------	------
NO REPORT	1,600	------	100	------
TYPE OF EMPLOYER				
PRIV.INDUSTRY,BUSINESS	211,100	2,200	23,900	1,800
SELF-EMPLOYED	11,400	200	300	------
COLLEGE,UNIVERSITY	20,200	600	1,200	100
JR.COLLEGE,TECH.INST.	900	------	------	------
SEC.,ELEM.,OTHER SCHOOL	300	------	------	------
NONPROFIT ORGANIZATION	5,400	------	1,100	100
FEDERAL GOVERNMENT	24,600	900	4,700	------
USPHS,MILITARY SERVICE	4,900	------	1,300	------
STATE GOVERNMENT	5,900	------	------	------
LOCAL GOVERNMENT	4,800	------	------	------
OTHER	4,600	------	300	------
NO REPORT	14,000	------	100	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

ACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES

	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
- - - -	308,000	4,000	33,000	2,100	19,500	7,700	11,000	45,900	14,600
- - - -	2,900	------	100	------	100	------	------	300	200
- - - -	11,700	100	2,200	------	800	300	700	1,300	500
- - - -	293,400	3,900	30,700	2,000	18,600	7,400	10,200	44,200	13,800
- - - -	254,700	3,300	29,000	1,500	16,500	6,700	8,600	41,700	11,500
- - - -	44,400	600	3,200	500	2,400	900	2,100	2,800	2,600
- - - -	8,800	100	800	100	600	200	400	1,400	500
- - - -	131,100	1,600	8,100	800	6,000	2,600	2,400	33,400	6,900
- - - -	171,400	2,300	24,300	1,300	1[illegible],100	5,000	8,400	11,700	7,400
- - - -	5,400	100	500	------	300	100	200	700	300
- - - -	293,600	4,000	32,900	2,100	19,400	7,700	11,000	45,600	14,500
- - - -	2,000	------	------	------	------	------	------	------	------
- - - -	10,700	------	------	------	------	------	------	------	------
- - - -	1,600	------	100	------	100	------	------	300	100
- - - -	211,100	2,200	23,900	1,800	17,900	6,500	9,500	22,100	700
- - - -	11,400	200	300	------	300	100	200	4,200	100
- - - -	20,200	600	1,200	100	400	100	300	1,500	12,000
- - - -	900	------	------	------	------	------	------	100	800
- - - -	300	------	------	------	------	------	------	------	200
- - - -	5,400	------	1,100	100	200	100	300	400	300
- - - -	24,600	900	4,700	------	400	500	400	7,300	200
- - - -	4,900	------	1,300	------	------	100	100	1,300	200
- - - -	5,900	------	------	------	------	------	------	4,800	100
- - - -	4,800	------	------	------	------	------	------	3,100	------
- - - -	4,600	------	300	------	200	200	100	1,000	------
- - - -	14,000	------	100	------	100	------	------	200	------

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NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SER

GENERAL CHARACTERISTICS	PRODUCTS OR S				
	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARI TRANS PORTA
TOTAL ENGINEERS REPORTING - - - - - - - - -	19,200	23,000	2,800	28,400	4,8
STUDENT STATUS					
FULL-TIME - - - - - - - - - - - - - -	------	100	------	100	-----
PART-TIME - - - - - - - - - - - - - -	600	1,200	100	900	2
NO REPORT - - - - - - - - - - - - - -	18,600	21,800	2,700	27,400	4,5
PROFESSIONAL IDENTIFICATION					
ENGINEER - - - - - - - - - - - - - - -	16,400	20,300	2,100	24,200	4,0
OTHER - - - - - - - - - - - - - - -	2,200	2,200	600	3,500	6
NO REPORT - - - - - - - - - - - - - -	500	500	100	700	1
REGISTERED ENGINEERS					
YES - - - - - - - - - - - - - - - - -	9,100	5,400	800	13,100	1,4
NO - - - - - - - - - - - - - - - - - -	9,700	17,200	1,900	14,900	3,3
NO REPORT - - - - - - - - - - - - - -	400	400	100	400	1
PROFESSIONAL EMPLOYMENT STATUS					
PROFESSIONALLY EMPLOYED - - - - - - -	19,100	22,900	2,800	28,300	4,7
SEEKING EMPLOYMENT - - - - - - - - - -	------	------	------	------	-----
NOT SEEKING EMPLOYMENT - - - - - - - -	------	------	------	------	-----
NO REPORT - - - - - - - - - - - - - -	100	100	------	100	-----
TYPE OF EMPLOYER					
PRIV.INDUSTRY,BUSINESS - - - - - - - -	16,500	19,100	2,200	23,800	2,8
SELF-EMPLOYED - - - - - - - - - - - -	800	400	100	2,100	1
COLLEGE,UNIVERSITY - - - - - - - - - -	100	500	100	500	1
JR.COLLEGE,TECH.INST. - - - - - - - -	------	------	------	------	-----
SEC.,ELEM.,OTHER SCHOOL - - - - - - -	------	------	------	------	-----
NONPROFIT ORGANIZATION - - - - - - - -	200	500	100	300	1
FEDERAL GOVERNMENT - - - - - - - - - -	1,000	2,000	300	900	1,1
USPHS,MILITARY SERVICE - - - - - - - -	------	100	------	100	5
STATE GOVERNMENT - - - - - - - - - - -	100	------	------	100	-----
LOCAL GOVERNMENT - - - - - - - - - - -	200	------	------	100	-----
OTHER - - - - - - - - - - - - - - - -	300	200	------	400	1
NO REPORT - - - - - - - - - - - - - -	100	100	------	100	-----

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

[C]HARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

[...]ISTICS	PRODUCTS OR SERVICES								
	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - - - - - -	19,200	23,000	2,800	28,400	4,800	1,300	12,600	6,300	5,900
- - - - - - - - -	------	100	------	100	------	------	200	------	100
- - - - - - - - -	600	1,200	100	900	200	100	500	300	100
- - - - - - - - -	18,600	21,800	2,700	27,400	4,500	1,100	11,900	6,000	5,800
- - - - - - - - -	16,400	20,300	2,100	24,200	4,000	1,000	6,400	4,700	3,900
- - - - - - - - -	2,200	2,200	600	3,500	600	200	6,000	1,300	1,900
- - - - - - - - -	500	500	100	700	100	------	300	200	200
- - - - - - - - -	9,100	5,400	800	13,100	1,400	400	3,000	2,400	2,100
- - - - - - - - -	9,700	17,200	1,900	14,900	3,300	900	9,400	3,800	3,700
- - - - - - - - -	400	400	100	400	100	------	200	100	100
[...]TUS									
[...]D - - - - - - - -	19,100	22,900	2,800	28,300	4,700	1,300	12,600	6,200	5,900
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	100	100	------	100	------	------	100	------	100
- - - - - - - - -	16,500	19,100	2,200	23,800	2,800	500	10,700	5,700	4,600
- - - - - - - - -	800	400	100	2,100	100	------	200	200	400
- - - - - - - - -	100	500	100	500	100	200	800	100	200
- - - - - - - - -	------	------	------	------	------	------	------	------	------
[...]L - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	200	500	100	300	100	200	400	100	------
- - - - - - - - -	1,000	2,000	300	900	1,100	100	500	100	600
- - - - - - - - -	------	100	------	100	500	100	------	------	------
- - - - - - - - -	100	------	------	100	------	------	------	------	100
- - - - - - - - -	200	------	------	100	------	------	------	------	------
- - - - - - - - -	300	200	------	400	100	------	100	------	------
- - - - - - - - -	100	100	------	100	------	------	100	------	------

NATIONAL REGISTER OF SCIENTIFIC AND

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA

PR

GENERAL CHARACTERISTICS	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLE
TOTAL ENGINEERS REPORTING	2,500	5,200	15,5
STUDENT STATUS			
FULL-TIME	------	------	1
PART-TIME	100	300	3
NO REPORT	2,400	4,90C	15,1
PROFESSIONAL IDENTIFICATION			
ENGINEER	2,000	4,400	12,8
OTHER	400	600	2,4
NO REPORT	100	200	3
REGISTERED ENGINEERS			
YES	900	1,50C	7,0
NO	1,600	3,60C	8,2
NO REPORT	------	------	3
PROFESSIONAL EMPLOYMENT STATUS			
PROFESSIONALLY EMPLOYED	2,500	5,100	15,4
SEEKING EMPLOYMENT	------	------	---
NOT SEEKING EMPLOYMENT	------	------	1
NO REPORT	------	------	
TYPE OF EMPLOYER			
PRIV.INDUSTRY,BUSINESS	2,000	2,800	14,1
SELF-EMPLOYED	------	------	7
COLLEGE,UNIVERSITY	100	10C	1
JR.COLLEGE,TECH.INST.	------	------	---
SEC.,ELEM.,OTHER SCHOOL	------	------	---
NONPROFIT ORGANIZATION	------	20C	[illegible]
FEDERAL GOVERNMENT	100	1,70C	[illegible]
USPHS,MILITARY SERVICE	------	300	---
STATE GOVERNMENT	100	------	[illegible]
LOCAL GOVERNMENT	------	------	---
OTHER	------	10C	
NO REPORT	------	------	---

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

CHARACTERISTICS	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
PORTING - - - - - - - - -	2,500	5,200	15,500	1,500	14,700	11,300	15,200
- - - - - - - - - - - - - -	------	------	100	------	------	100	1,300
- - - - - - - - - - - - - -	100	300	300	100	300	500	200
- - - - - - - - - - - - - -	2,400	4,900	15,100	1,500	14,400	10,800	13,700
IFICATION							
- - - - - - - - - - - - - -	2,000	4,400	12,800	1,300	12,800	7,700	11,800
- - - - - - - - - - - - - -	400	600	2,400	200	1,500	3,300	2,500
- - - - - - - - - - - - - -	100	200	300	------	400	300	900
RS							
- - - - - - - - - - - - - -	900	1,500	7,000	700	9,500	4,200	7,700
- - - - - - - - - - - - - -	1,600	3,600	8,200	800	5,000	6,800	7,000
- - - - - - - - - - - - - -	------	------	300	------	200	300	400
YMENT STATUS							
Y EMPLOYED - - - - - - - -	2,500	5,100	15,400	1,500	14,700	11,300	2,200
YMENT - - - - - - - - - -	------	------	------	------	------	------	2,000
MPLOYMENT - - - - - - - -	------	------	------	------	------	------	10,700
- - - - - - - - - - - - - -	------	------	100	------	100	------	200
,BUSINESS - - - - - - - - -	2,000	2,800	14,100	1,300	11,400	8,000	1,200
) - - - - - - - - - - - - -	------	------	700	------	300	500	100
RSITY - - - - - - - - - - -	100	100	100	------	------	400	400
CH.INST. - - - - - - - - -	------	------	------	------	------	------	------
HER SCHOOL - - - - - - - -	------	------	------	------	------	------	------
ANIZATION - - - - - - - - -	------	200	100	------	100	700	100
NMENT - - - - - - - - - - -	100	1,700	200	------	600	800	200
Y SERVICE - - - - - - - - -	------	300	------	------	------	200	200
MENT - - - - - - - - - - - -	100	------	100	------	200	300	------
ENT - - - - - - - - - - - -	------	------	------	100	1,000	100	------
- - - - - - - - - - - - - -	------	100	100	------	1,100	300	------
- - - - - - - - - - - - - -	------	------	------	------	100	------	12,900

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRO

GENERAL CHARACTERISTICS	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CER
AREAS OF TECHNOLOGY				
BIOMEDICAL - - - - - - - - - - - - - - - -	1,600	200	200	--
BEHAVIORAL AND SOCIAL - - - - - - - - -	4,100	100	100	--
CHEMICAL AND MATERIALS - - - - - - - - -	11,700	100	1,100	
METALLURGICAL - - - - - - - - - - - - -	12,100	------	600	
EARTH,ATMOSPHERE,MARINE - - - - - - - - -	9,900	100	200	
ENVIRONMENTAL,STRUCTURAL - - - - - - - -	33,700	800	2,100	
ELECTROMAGNETIC - - - - - - - - - - - -	42,800	100	2,300	
DYNAMICS AND MECHANICS - - - - - - - - -	40,100	400	9,900	
HEAT,LIGHT,APPL. PHYSICS - - - - - - - -	8,500	------	1,600	
NUCLEAR - - - - - - - - - - - - - - - -	2,600	------	100	--
ENGR.PROCESS-APPLICATION - - - - - - - -	32,100	700	2,000	
AUTOMATION AND CONTROL - - - - - - - - -	12,400	100	2,300	
WORK MGMT,EVALUATION - - - - - - - - - -	56,500	1,100	7,600	
INFORMATION,MATHEMATICS - - - - - - - -	11,500	------	1,400	--
OTHER - - - - - - - - - - - - - - - - -	9,700	300	1,300	
NO REPORT - - - - - - - - - - - - - - -	18,700	100	400	--
FUNCTION				
DESIGN - - - - - - - - - - - - - - - - -	53,600	400	6,200	
DEVELOPMENT - - - - - - - - - - - - - -	32,300	300	6,600	
RESEARCH - - - - - - - - - - - - - - - -	22,000	800	4,600	
PRODUCTION - - - - - - - - - - - - - - -	56,600	800	2,500	
CONTROL - - - - - - - - - - - - - - - -	104,700	1,400	11,000	
TEACHING - - - - - - - - - - - - - - - -	14,700	200	600	
OTHER - - - - - - - - - - - - - - - - -	6,200	100	1,100	--
NO REPORT - - - - - - - - - - - - - - -	17,900	100	400	--
SUPERVISORY LEVEL				
NO REG. SUPV. GIVEN - - - - - - - - - -	52,200	700	7,100	
INDIRECT OR STAFF - - - - - - - - - - -	50,400	700	7,100	
TEAM OR UNIT - - - - - - - - - - - - - -	33,900	400	5,400	
PROJECT OR SECTION - - - - - - - - - - -	61,700	1,000	6,600	
MAJOR DEPT.,DIV.,PROGRAM - - - - - - - -	56,900	900	4,700	
GEN.MGMT OF ORGANIZATION - - - - - - - -	28,800	300	1,200	
NO REPORT - - - - - - - - - - - - - - -	24,000	200	900	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

ERISTICS	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
- - - - - - - - - - -	1,600	200	200	------	100	------	------	100	100
L - - - - - - - - - -	4,100	100	100	------	400	100	------	200	1,600
LS - - - - - - - - -	11,700	10C	1,100	400	4,000	100	100	500	500
- - - - - - - - - - -	12,100	------	600	100	200	------	100	100	50C
INE - - - - - - - - -	9,900	10C	200	100	100	------	100	1,400	40C
URAL - - - - - - - -	33,700	800	2,100	300	400	------	100	20,400	1,600
- - - - - - - - - - -	42,800	10C	2,300	100	300	5,200	1,700	900	1,300
CS - - - - - - - - -	40,100	400	9,900	200	1,400	100	300	3,000	3,200
SICS - - - - - - - -	8,500	------	1,600	100	600	100	100	200	80C
- - - - - - - - - - -	2,600	------	100	------	300	------	------	100	200
TION - - - - - - - -	32,100	700	2,000	200	3,900	300	300	1C,000	1,000
OL - - - - - - - - -	12,400	100	2,300	100	800	100	500	500	300
- - - - - - - - - - -	56,500	1,10C	7,600	500	5,600	1,300	2,300	5,300	1,200
ICS - - - - - - - -	11,500	------	1,400	------	300	200	5,100	700	1,000
- - - - - - - - - - -	9,700	300	1,300	100	1,000	200	200	1,400	500
- - - - - - - - - - -	18,700	100	400	------	300	100	200	900	300
- - - - - - - - - - -	53,600	400	6,200	100	2,800	1,300	2,100	13,400	200
- - - - - - - - - - -	32,300	300	6,600	300	3,200	1,000	1,700	1,300	100
- - - - - - - - - - -	22,000	80C	4,600	300	1,600	400	600	1,500	80C
- - - - - - - - - - -	56,600	800	2,500	600	4,700	1,100	1,400	8,500	100
- - - - - - - - - - -	104,700	1,400	11,000	600	6,300	3,500	4,600	19,200	2,200
- - - - - - - - - - -	14,700	20C	600	100	200	100	200	800	10,80C
- - - - - - - - - - -	6,200	100	1,100	------	500	200	300	600	200
- - - - - - - - - - -	17,900	100	400	------	200	200	100	600	20C
- - - - - - - - - - -	52,200	700	7,100	300	3,400	1,300	2,500	6,100	4,000
- - - - - - - - - - -	50,400	700	7,100	200	3,500	1,500	2,100	6,400	2,80C
- - - - - - - - - - -	33,900	400	5,400	200	2,600	1,300	1,500	4,200	1,60C
- - - - - - - - - - -	61,700	1,00C	6,600	400	3,900	1,600	2,300	11,200	2,10C
GRAM - - - - - - - -	56,900	900	4,700	700	4,200	1,300	1,700	8,700	2,80C
TION - - - - - - - -	28,800	30C	1,200	100	1,200	500	600	7,500	70C
- - - - - - - - - - -	24,000	20C	900	100	600	200	400	1,800	60C

NATIONAL REGISTER OF SCIENT

CHARACTERISTICS OF ENGINEERS MEETING

GENERAL CHARACTERISTICS	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES
AREAS OF TECHNOLOGY		
BIOMEDICAL	------	10
BEHAVIORAL AND SOCIAL	------	10
CHEMICAL AND MATERIALS	400	20
METALLURGICAL	300	10
EARTH, ATMOSPHERE, MARINE	------	20
ENVIRONMENTAL, STRUCTURAL	200	10
ELECTROMAGNETIC	10,500	10,00
DYNAMICS AND MECHANICS	1,100	80
HEAT, LIGHT, APPL. PHYSICS	400	1,30
NUCLEAR	300	10
ENGR. PROCESS-APPLICATION	600	1,30
AUTOMATION AND CONTROL	1,700	2,40
WORK MGMT, EVALUATION	2,800	4,90
INFORMATION, MATHEMATICS	200	70
OTHER	300	40
NO REPORT	300	30
FUNCTION		
DESIGN	4,600	4,90
DEVELOPMENT	2,100	4,70
RESEARCH	700	1,70
PRODUCTION	5,200	3,40
CONTROL	5,900	7,40
TEACHING	100	20
OTHER	400	50
NO REPORT	300	20
SUPERVISORY LEVEL		
NO REG. SUPV. GIVEN	3,700	3,60
INDIRECT OR STAFF	3,100	3,90
TEAM OR UNIT	2,200	3,40
PROJECT OR SECTION	4,300	5,60
MAJOR DEPT., DIV., PROGRAM	3,300	4,30
GEN. MGMT OF ORGANIZATION	1,900	1,60
NO REPORT	600	60

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

HARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

ISTICS	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - - - - - -	------	100	100	100	------	400	------	------	------
- - - - - - - - -	------	100	------	100	------	------	100	------	100
- - - - - - - - -	400	200	100	1,100	------	------	1,100	500	100
- - - - - - - - -	300	100	------	500	100	------	7,300	900	800
E - - - - - - - - -	------	200	100	200	900	------	100	------	3,600
AL - - - - - - - - -	200	100	100	2,700	600	100	100	400	200
- - - - - - - - -	10,500	10,000	200	700	300	------	200	100	100
- - - - - - - - -	1,100	800	300	11,200	800	100	500	900	100
CS - - - - - - - - -	400	1,300	400	1,500	100	------	100	300	------
- - - - - - - - -	300	100	------	600	100	------	------	------	------
ON - - - - - - - - -	600	1,300	100	2,300	500	------	600	700	300
- - - - - - - - -	1,700	2,400	900	800	100	100	200	100	------
- - - - - - - - -	2,800	4,900	400	5,300	900	300	2,000	2,000	500
S - - - - - - - - -	200	700	100	400	100	------	100	100	------
- - - - - - - - -	300	400	100	700	200	------	100	100	100
- - - - - - - - -	300	300	------	500	100	------	100	100	100
- - - - - - - - -	4,600	4,900	400	7,200	1,400	200	600	900	300
- - - - - - - - -	2,100	4,700	500	2,700	500	200	1,500	700	300
- - - - - - - - -	700	1,700	400	1,100	300	200	2,800	400	500
- - - - - - - - -	5,200	3,400	600	7,800	600	100	3,700	1,600	2,200
- - - - - - - - -	5,900	7,400	800	8,500	1,800	500	3,400	2,300	2,400
- - - - - - - - -	100	200	------	300	100	100	300	------	100
- - - - - - - - -	400	500	------	400	100	------	100	100	100
- - - - - - - - -	300	200	------	400	------	------	200	100	100
- - - - - - - - -	3,700	3,600	400	5,200	900	200	2,400	900	700
- - - - - - - - -	3,100	3,900	400	4,200	600	200	2,400	1,000	900
- - - - - - - - -	2,200	3,400	300	2,500	500	100	1,300	400	500
- - - - - - - - -	4,300	5,600	500	5,600	1,100	200	2,300	1,000	1,100
AM - - - - - - - -	3,300	4,300	600	5,600	1,000	300	2,900	1,500	1,600
ON - - - - - - - -	1,900	1,600	500	4,400	500	100	1,000	1,100	900
- - - - - - - - -	600	600	100	1,000	100	------	400	200	200

NATIONAL REGISTER OF SCIENTIFIC A

CHARACTERISTICS OF ENGINEERS MEETING CRITE

GENERAL CHARACTERISTICS	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETR
AREAS OF TECHNOLOGY			
BIOMEDICAL	------	------	--
BEHAVIORAL AND SOCIAL	------	------	
CHEMICAL AND MATERIALS	100	100	
METALLURGICAL	200	100	
EARTH,ATMOSPHERE,MARINE	------	100	1
ENVIRONMENTAL,STRUCTURAL	300	100	
ELECTROMAGNETIC	100	500	
DYNAMICS AND MECHANICS	500	1,100	1
HEAT,LIGHT,APPL. PHYSICS	------	100	
NUCLEAR	------	------	--
ENGR.PROCESS-APPLICATION	200	500	5
AUTOMATION AND CONTROL	100	300	
WORK MGMT,EVALUATION	900	2,000	3
INFORMATION,MATHEMATICS	100	100	
OTHER	------	200	1
NO REPORT	100	------	
FUNCTION			
DESIGN	300	700	1
DEVELOPMENT	500	1,200	1
RESEARCH	200	400	1
PRODUCTION	300	700	4
CONTROL	900	1,900	6
TEACHING	100	------	
OTHER	100	200	
NO REPORT	------	------	
SUPERVISORY LEVEL			
NO REG. SUPV. GIVEN	400	1,100	3
INDIRECT OR STAFF	500	1,000	3
TEAM OR UNIT	300	700	1
PROJECT OR SECTION	500	1,200	3
MAJOR DEPT.,DIV.,PROGRAM	500	900	2
GEN.MGMT OF ORGANIZATION	100	200	1
NO REPORT	100	100	

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

RISTICS	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
	------	------	------	------	------	100	------
	------	------	700	------	200	300	------
S	100	100	500	------	300	500	------
	200	100	100	------	------	200	100
NE	------	10C	1,800	------	100	200	100
RAL	300	10C	400	400	1,500	700	100
	100	50C	300	100	7,100	600	100
S	500	1,100	1,300	200	1,800	1,000	100
ICS	------	10C	200	------	100	300	100
	------	------	------	------	300	200	------
ION	200	500	5,000	100	700	900	100
L	100	300	400	100	400	400	100
	900	2,00C	3,200	400	1,400	4,500	200
CS	100	100	400	100	200	200	------
	------	20C	1,000	------	400	1,100	------
	100	------	300	------	200	300	14,200
	300	700	1,300	300	2,700	800	200
	500	1,200	1,000	100	700	1,000	100
	200	400	1,000	------	300	900	200
	300	700	4,500	300	4,100	1,700	100
	900	1,900	6,900	700	6,300	5,900	400
	100	------	100	------	100	200	100
	100	200	400	------	400	600	------
	------	------	300	------	200	200	14,100
	400	1,100	3,000	200	1,900	1,800	300
	500	1,000	3,200	200	2,400	1,900	100
	300	70C	1,600	100	1,800	1,000	100
	500	1,200	3,000	400	3,600	2,000	200
RAM	500	900	2,600	300	3,600	2,700	200
ION	100	20C	1,400	100	1,100	1,600	100
	100	10C	600	100	400	400	14,100

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUC

GENERAL CHARACTERISTICS	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMI
ALL GEOGRAPHIC LOCATIONS	308,000	4,000	33,000	2,10
NEW ENGLAND	21,800	100	2,600	10
CONNECTICUT	6,600	------	1,400	-----
MAINE	700	------	------	-----
MASSACHUSETTS	12,300	------	1,100	10
NEW HAMPSHIRE	900	------	------	-----
RHODE ISLAND	1,000	------	------	-----
VERMONT	500	------	------	-----
MIDDLE ATLANTIC	66,400	500	4,400	70
NEW JERSEY	14,500	100	700	-----
NEW YORK	29,200	300	2,100	30
PENNSYLVANIA	22,700	100	1,500	30
EAST NORTH CENTRAL	52,200	700	3,300	60
ILLINOIS	14,800	300	200	10
INDIANA	5,800	100	300	-----
MICHIGAN	9,200	100	200	10
OHIO	17,500	100	2,400	30
WISCONSIN	5,000	100	100	-----
WEST NORTH CENTRAL	18,500	500	1,600	10
IOWA	2,800	100	100	-----
KANSAS	2,000	100	400	-----
MINNESOTA	4,600	200	300	-----
MISSOURI	7,000	100	900	-----
NEBRASKA	1,500	------	------	-----
NORTH DAKOTA	300	------	------	-----
SOUTH DAKOTA	400	------	------	-----
SOUTH ATLANTIC	39,300	700	4,500	20
DELAWARE	2,100	------	------	-----
DISTRICT OF COLUMBIA	5,900	------	900	-----
FLORIDA	6,700	100	1,300	-----
GEORGIA	3,100	100	600	-----
MARYLAND	7,600	100	800	-----
NORTH CAROLINA	3,700	200	100	-----
SOUTH CAROLINA	2,000	100	------	-----
VIRGINIA	6,300	100	800	-----
WEST VIRGINIA	2,000	------	------	-----

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

CTERISTICS	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
S - - - - - - - - - -	308,000	4,000	33,000	2,100	19,500	7,700	11,000	45,900	14,600
- - - - - - - - - - -	21,800	100	2,600	100	900	500	1,000	2,400	1,200
- - - - - - - - - - -	6,600	------	1,400	------	300	100	200	500	200
- - - - - - - - - - -	700	------	------	------	------	------	------	200	100
- - - - - - - - - - -	12,300	------	1,100	100	500	300	800	1,400	600
- - - - - - - - - - -	900	------	------	------	------	------	------	100	100
- - - - - - - - - - -	1,000	------	------	------	------	------	------	100	100
- - - - - - - - - - -	500	------	------	------	------	------	100	100	100
- - - - - - - - - - -	66,400	500	4,400	700	5,000	2,400	3,300	8,100	2,700
- - - - - - - - - - -	14,500	100	700	------	2,000	1,100	800	1,300	500
- - - - - - - - - - -	29,200	300	2,100	300	1,900	900	1,700	4,100	1,400
- - - - - - - - - - -	22,700	100	1,500	300	1,100	400	800	2,700	800
- - - - - - - - - - -	52,200	700	3,300	600	3,200	1,300	1,000	6,600	2,800
- - - - - - - - - - -	14,800	300	200	100	800	600	300	2,400	600
- - - - - - - - - - -	5,800	100	300	------	300	100	------	600	600
- - - - - - - - - - -	9,200	100	200	100	800	100	200	1,200	500
- - - - - - - - - - -	17,500	100	2,400	300	1,100	300	400	1,600	800
- - - - - - - - - - -	5,000	100	100	------	100	100	100	800	400
- - - - - - - - - - -	18,500	500	1,600	100	1,100	400	900	3,800	1,300
- - - - - - - - - - -	2,800	100	100	------	100	200	100	400	300
- - - - - - - - - - -	2,000	100	400	------	100	------	------	500	200
- - - - - - - - - - -	4,600	200	300	------	200	100	600	600	200
- - - - - - - - - - -	7,000	100	900	------	800	100	100	1,500	400
- - - - - - - - - - -	1,500	------	------	------	------	------	------	600	100
- - - - - - - - - - -	300	------	------	------	------	------	------	100	------
- - - - - - - - - - -	400	------	------	------	------	------	------	100	------
- - - - - - - - - - -	39,300	700	4,500	200	3,500	1,300	1,000	6,500	1,800
- - - - - - - - - - -	2,100	------	------	------	1,100	------	------	200	100
UMBIA - - - - - - - -	5,900	------	900	------	100	300	100	1,300	100
- - - - - - - - - - -	6,700	100	1,300	------	300	200	200	900	200
- - - - - - - - - - -	3,100	100	600	------	100	100	------	600	200
- - - - - - - - - - -	7,600	100	800	------	300	200	300	1,100	200
- - - - - - - - - - -	3,700	200	100	------	200	200	100	600	300
- - - - - - - - - - -	2,000	100	------	------	300	------	------	400	100
- - - - - - - - - - -	6,300	100	800	------	400	200	100	1,200	400
- - - - - - - - - - -	2,000	------	------	------	800	------	------	300	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONN

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR S

PRODUCTS OR

GENERAL CHARACTERISTICS	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MA TR POR
ALL GEOGRAPHIC LOCATIONS - - - - - - - - - -	19,200	23,000	2,800	28,400	4
NEW ENGLAND - - - - - - - - - - - - - -	1,600	2,800	500	2,100	
CONNECTICUT - - - - - - - - - - - - -	500	500	100	700	
MAINE - - - - - - - - - - - - - - - -	------	------	------	------	
MASSACHUSETTS - - - - - - - - - - - -	900	2,000	400	1,100	
NEW HAMPSHIRE - - - - - - - - - - - -	100	200	------	------	
RHODE ISLAND - - - - - - - - - - - -	100	100	------	100	--
VERMONT - - - - - - - - - - - - - - -	------	------	------	------	--
MIDDLE ATLANTIC - - - - - - - - - - - -	5,500	6,100	700	6,800	1
NEW JERSEY - - - - - - - - - - - - -	1,000	1,900	100	1,300	
NEW YORK - - - - - - - - - - - - - -	2,200	2,800	400	2,900	
PENNSYLVANIA - - - - - - - - - - - -	2,300	1,400	200	2,600	
EAST NORTH CENTRAL - - - - - - - - - - -	4,900	2,800	400	7,600	
ILLINOIS - - - - - - - - - - - - - -	1,300	900	100	2,600	--
INDIANA - - - - - - - - - - - - - - -	600	500	------	500	--
MICHIGAN - - - - - - - - - - - - - -	600	300	100	1,100	--
OHIO - - - - - - - - - - - - - - - -	1,700	900	200	2,400	
WISCONSIN - - - - - - - - - - - - - -	700	200	------	1,000	--
WEST NORTH CENTRAL - - - - - - - - - - -	1,100	1,000	100	1,900	--
IOWA - - - - - - - - - - - - - - - -	200	300	------	500	--
KANSAS - - - - - - - - - - - - - - -	------	------	------	200	--
MINNESOTA - - - - - - - - - - - - - -	400	300	100	500	--
MISSOURI - - - - - - - - - - - - - -	400	400	------	500	--
NEBRASKA - - - - - - - - - - - - - -	100	------	------	200	--
NORTH DAKOTA - - - - - - - - - - - -	------	------	------	------	--
SOUTH DAKOTA - - - - - - - - - - - -	------	------	------	------	--
SOUTH ATLANTIC - - - - - - - - - - - - -	1,700	2,900	200	3,100	1
DELAWARE - - - - - - - - - - - - - -	100	------	------	200	--
DISTRICT OF COLUMBIA - - - - - - - -	200	500	------	200	
FLORIDA - - - - - - - - - - - - - - -	200	500	------	500	
GEORGIA - - - - - - - - - - - - - - -	200	100	------	300	--
MARYLAND - - - - - - - - - - - - - -	200	1,100	------	600	
NORTH CAROLINA - - - - - - - - - - -	300	200	------	500	--
SOUTH CAROLINA - - - - - - - - - - -	100	------	------	300	--
VIRGINIA - - - - - - - - - - - - - -	400	400	------	400	
WEST VIRGINIA - - - - - - - - - - - -	------	------	------	100	--

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RACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

TICS	PRODUCTS OR SERVICES								
	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - - - - -	19,200	23,000	2,800	28,400	4,800	1,300	12,600	6,300	5,900
- - - - - - - -	1,600	2,800	500	2,100	700	100	700	700	100
- - - - - - - -	500	500	100	700	300	------	300	400	------
- - - - - - - -	------	------	------	------	100	------	------	------	------
- - - - - - - -	900	2,000	400	1,100	200	------	400	200	------
- - - - - - - -	100	200	------	------	100	------	------	------	------
- - - - - - - -	100	100	------	100	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	5,500	6,100	700	6,800	1,100	300	4,200	1,500	900
- - - - - - - -	1,000	1,900	100	1,300	100	100	500	300	100
- - - - - - - -	2,200	2,800	400	2,900	700	100	1,200	400	400
- - - - - - - -	2,300	1,400	200	2,600	300	100	2,600	800	500
- - - - - - - -	4,900	2,800	400	7,600	200	200	3,400	1,800	600
- - - - - - - -	1,300	900	100	2,600	------	100	800	400	200
- - - - - - - -	600	500	------	500	------	------	500	200	100
- - - - - - - -	600	300	100	1,100	------	------	500	300	200
- - - - - - - -	1,700	900	200	2,400	100	------	1,500	700	200
- - - - - - - -	700	200	------	1,000	------	100	100	200	100
- - - - - - - -	1,100	1,000	100	1,900	------	100	400	300	500
- - - - - - - -	200	300	------	500	------	------	100	------	------
- - - - - - - -	------	------	------	200	------	------	------	------	------
- - - - - - - -	400	300	100	500	------	100	100	100	300
- - - - - - - -	400	400	------	500	------	------	200	100	100
- - - - - - - -	100	------	------	200	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	1,700	2,900	200	3,100	1,600	200	900	500	600
- - - - - - - -	100	------	------	200	------	------	------	------	------
- - - - - - - -	200	500	------	200	500	------	100	------	100
- - - - - - - -	200	500	------	500	100	------	------	100	100
- - - - - - - -	200	100	------	300	------	------	------	100	------
- - - - - - - -	200	1,100	------	600	500	100	200	100	------
- - - - - - - -	300	200	------	500	------	------	100	100	------
- - - - - - - -	100	------	------	300	------	------	100	100	------
- - - - - - - -	400	400	------	400	400	------	200	100	100
- - - - - - - -	------	------	------	100	------	------	200	------	200

NATIONAL REGISTER OF SCIE

CHARACTERISTICS OF ENGINEERS MEETI

GENERAL CHARACTERISTICS	MOTOR VEHICLE TRANS- PORTATION	ORDNA
ALL GEOGRAPHIC LOCATIONS	2,500	5,2
NEW ENGLAND	100	4
CONNECTICUT	------	----
MAINE	------	----
MASSACHUSETTS	------	3
NEW HAMPSHIRE	------	----
RHODE ISLAND	------	1
VERMONT	------	----
MIDDLE ATLANTIC	200	6
NEW JERSEY	100	3
NEW YORK	100	1
PENNSYLVANIA	100	1
EAST NORTH CENTRAL	1,700	6
ILLINOIS	100	2
INDIANA	200	1
MICHIGAN	1,100	2
OHIO	200	1
WISCONSIN	100	----
WEST NORTH CENTRAL	------	2
IOWA	------	----
KANSAS	------	----
MINNESOTA	------	[illegible]
MISSOURI	------	[illegible]
NEBRASKA	------	----
NORTH DAKOTA	------	----
SOUTH DAKOTA	------	----
SOUTH ATLANTIC	200	1,
DELAWARE	------	----
DISTRICT OF COLUMBIA	100	[illegible]
FLORIDA	------	[illegible]
GEORGIA	------	----
MARYLAND	------	[illegible]
NORTH CAROLINA	------	----
SOUTH CAROLINA	------	----
VIRGINIA	------	[illegible]
WEST VIRGINIA	------	----

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

L CHARACTERISTICS	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
LOCATIONS - - - - - - - - - -	2,500	5,200	15,500	1,500	14,700	11,300	15,200
- - - - - - - - - - - - - - -	100	400	------	------	1,100	900	1,300
ICUT - - - - - - - - - - - - -	------	------	------	------	300	300	300
- - - - - - - - - - - - - - -	------	------	------	------	------	100	100
USETTS - - - - - - - - - - - -	------	300	------	------	600	500	700
PSHIRE - - - - - - - - - - - -	------	------	------	------	100	------	100
SLAND - - - - - - - - - - - -	------	100	------	------	100	------	100
- - - - - - - - - - - - - - -	------	------	------	------	------	------	------
ANTIC - - - - - - - - - - - -	200	600	1,700	600	3,100	2,700	3,300
SEY - - - - - - - - - - - - -	100	300	400	------	600	400	700
K - - - - - - - - - - - - - -	100	100	700	200	1,300	1,500	1,500
VANIA - - - - - - - - - - - -	100	100	600	300	1,300	800	1,100
CENTRAL - - - - - - - - - - -	1,700	600	1,100	300	2,900	2,200	2,100
S - - - - - - - - - - - - - -	100	200	500	200	700	700	700
- - - - - - - - - - - - - - -	200	100	200	------	300	200	200
N - - - - - - - - - - - - - -	1,100	200	100	------	700	200	400
- - - - - - - - - - - - - - -	200	100	200	------	800	800	600
IN - - - - - - - - - - - - - -	100	------	------	------	300	300	200
CENTRAL - - - - - - - - - - -	------	200	600	200	1,200	500	800
- - - - - - - - - - - - - - -	------	------	------	------	200	100	100
- - - - - - - - - - - - - - -	------	------	200	------	100	------	100
TA - - - - - - - - - - - - - -	------	100	------	------	200	200	200
I - - - - - - - - - - - - - -	------	100	100	100	500	200	400
A - - - - - - - - - - - - - -	------	------	100	------	200	------	------
AKOTA - - - - - - - - - - - -	------	------	------	------	------	------	------
AKOTA - - - - - - - - - - - -	------	------	------	------	------	------	------
NTIC - - - - - - - - - - - - -	200	1,100	300	100	1,800	2,000	2,500
E - - - - - - - - - - - - - -	------	------	------	------	100	100	------
T OF COLUMBIA - - - - - - - -	100	200	100	------	200	400	200
- - - - - - - - - - - - - - -	------	200	100	------	600	200	900
- - - - - - - - - - - - - - -	------	------	------	------	100	300	200
D - - - - - - - - - - - - - -	------	500	------	------	300	300	400
AROLINA - - - - - - - - - - -	------	------	------	------	200	300	200
AROLINA - - - - - - - - - - -	------	------	------	------	100	200	100
A - - - - - - - - - - - - - -	------	100	------	------	100	300	400
RGINIA - - - - - - - - - - - -	------	------	100	------	100	------	------

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PR

GENERAL CHARACTERISTICS	TOTAL	AGRICUL-TURE & FOOD	AIRCRAFT & SPACE
GEOGRAPHIC LOCATION, CONTINUED			
EAST SOUTH CENTRAL	11,900	200	1,300
ALABAMA	4,000	------	900
KENTUCKY	1,900	100	------
MISSISSIPPI	1,200	100	100
TENNESSEE	4,800	100	300
WEST SOUTH CENTRAL	29,500	300	2,200
ARKANSAS	900	------	------
LOUISIANA	5,100	100	200
OKLAHOMA	4,300	------	200
TEXAS	19,200	200	1,800
MOUNTAIN	14,800	300	1,200
ARIZONA	3,100	100	200
COLORADO	4,800	100	500
IDAHO	900	100	------
MONTANA	800	------	------
NEVADA	900	------	------
NEW MEXICO	2,000	------	200
UTAH	1,600	------	200
WYOMING	500	------	------
PACIFIC	50,700	600	11,800
ALASKA	600	------	------
CALIFORNIA	41,400	400	10,100
HAWAII	1,000	100	------
OREGON	1,700	------	------
WASHINGTON	6,000	100	1,600
OUTLYING AREAS	500	------	------
CANAL ZONE	------	------	------
GUAM	------	------	------
PUERTO RICO	500	------	------
VIRGIN ISLANDS	------	------	------
FOREIGN	2,200	------	200

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

ERISTICS	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
INUED									
- - - - - - - - - -	11,900	200	1,300	100	1,200	300	200	2,300	700
- - - - - - - - - -	4,000	------	900	------	300	200	100	600	300
- - - - - - - - - -	1,900	100	------	------	200	------	------	400	100
- - - - - - - - - -	1,200	100	100	------	------	------	------	400	100
- - - - - - - - - -	4,800	100	300	------	700	100	100	800	300
- - - - - - - - - -	29,500	300	2,200	100	2,800	400	900	3,500	1,300
- - - - - - - - - -	900	------	------	------	------	------	------	200	100
- - - - - - - - - -	5,100	100	200	------	600	100	------	700	200
- - - - - - - - - -	4,300	------	200	------	100	100	100	500	200
- - - - - - - - - -	19,200	200	1,800	100	2,000	200	700	2,000	800
- - - - - - - - - -	14,800	300	1,200	------	300	200	500	2,500	1,000
- - - - - - - - - -	3,100	100	200	------	------	------	200	400	200
- - - - - - - - - -	4,800	100	500	------	100	100	100	900	300
- - - - - - - - - -	900	100	------	------	100	------	------	200	100
- - - - - - - - - -	800	------	------	------	------	------	------	200	100
- - - - - - - - - -	900	------	------	------	------	------	------	200	100
- - - - - - - - - -	2,000	------	200	------	------	------	100	300	100
- - - - - - - - - -	1,600	------	200	------	------	------	------	200	100
- - - - - - - - - -	500	------	------	------	------	------	------	100	------
- - - - - - - - - -	50,700	600	11,800	200	1,300	900	2,300	9,200	1,700
- - - - - - - - - -	600	------	------	------	------	------	------	300	------
- - - - - - - - - -	41,400	400	10,100	200	1,000	800	2,100	6,800	1,200
- - - - - - - - - -	1,000	100	------	------	------	------	------	400	100
- - - - - - - - - -	1,700	------	------	------	------	------	------	600	100
- - - - - - - - - -	6,000	100	1,600	------	300	100	100	1,100	300
- - - - - - - - - -	500	------	------	------	------	------	------	300	100
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	500	------	------	------	------	------	------	200	100
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	2,200	------	200	------	100	100	100	700	100

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY

GENERAL CHARACTERISTICS	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT
GEOGRAPHIC LOCATION, CONTINUED			
EAST SOUTH CENTRAL	800	400	100
ALABAMA	200	200	------
KENTUCKY	200	100	------
MISSISSIPPI	------	------	------
TENNESSEE	400	100	------
WEST SOUTH CENTRAL	1,000	1,300	100
ARKANSAS	100	------	------
LOUISIANA	200	100	------
OKLAHOMA	100	100	------
TEXAS	600	1,200	100
MOUNTAIN	500	1,100	100
ARIZONA	100	400	------
COLORADO	200	300	100
IDAHO	------	------	------
MONTANA	100	------	------
NEVADA	------	------	------
NEW MEXICO	100	200	------
UTAH	100	100	------
WYOMING	------	------	------
PACIFIC	2,000	4,600	500
ALASKA	------	------	------
CALIFORNIA	1,400	4,300	500
HAWAII	100	------	------
OREGON	200	100	------
WASHINGTON	300	200	------
OUTLYING AREAS	------	------	------
CANAL ZONE	------	------	------
GUAM	------	------	------
PUERTO RICO	------	------	------
VIRGIN ISLANDS	------	------	------
FOREIGN	100	------	------

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

ERISTICS	PRODUCTS OR SERVICES								
	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS- PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
INUED									
- - - - - - - - - - -	800	400	100	1,000	100	------	500	300	300
- - - - - - - - - - -	200	200	------	200	------	------	200	100	100
- - - - - - - - - - -	200	100	------	200	------	------	100	100	100
- - - - - - - - - - -	------	------	------	100	100	------	------	------	------
- - - - - - - - - - -	400	100	------	500	------	------	300	200	100
- - - - - - - - - - -	1,000	1,300	100	2,200	200	100	600	500	300
- - - - - - - - - - -	100	------	------	100	------	------	------	------	------
- - - - - - - - - - -	200	100	------	400	200	------	100	100	------
- - - - - - - - - - -	100	100	------	300	------	------	100	100	100
- - - - - - - - - - -	600	1,200	100	1,400	100	------	400	300	200
- - - - - - - - - - -	500	1,100	100	800	------	100	700	100	1,800
- - - - - - - - - - -	100	400	------	100	------	------	200	------	400
- - - - - - - - - - -	200	300	100	300	------	------	200	100	400
- - - - - - - - - - -	------	------	------	100	------	------	------	------	100
- - - - - - - - - - -	100	------	------	------	------	------	------	------	100
- - - - - - - - - - -	------	------	------	------	------	------	100	------	200
- - - - - - - - - - -	100	200	------	100	------	------	100	------	100
- - - - - - - - - - -	100	100	------	100	------	------	100	------	400
- - - - - - - - - - -	------	------	------	------	------	------	------	------	100
- - - - - - - - - - -	2,000	4,600	500	2,800	800	200	1,000	500	700
- - - - - - - - - - -	------	------	------	------	------	------	------	------	100
- - - - - - - - - - -	1,400	4,300	500	2,200	600	200	800	400	500
- - - - - - - - - - -	100	------	------	------	100	------	------	------	------
- - - - - - - - - - -	200	100	------	200	------	------	100	------	------
- - - - - - - - - - -	300	200	------	400	100	------	200	------	100
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	100	------	------	100	------	------	100	------	100

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY

PRODU

GENERAL CHARACTERISTICS	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM
GEOGRAPHIC LOCATION, CONTINUED			
EAST SOUTH CENTRAL - - - - - - - - - - -	------	300	100
ALABAMA - - - - - - - - - - - - - -	------	200	------
KENTUCKY - - - - - - - - - - - - -	------	------	------
MISSISSIPPI - - - - - - - - - - - -	------	------	100
TENNESSEE - - - - - - - - - - - - -	------	------	------
WEST SOUTH CENTRAL - - - - - - - - - - -	------	100	8,700
ARKANSAS - - - - - - - - - - - - -	------	------	100
LOUISIANA - - - - - - - - - - - - -	------	------	1,500
OKLAHOMA - - - - - - - - - - - - -	------	------	1,800
TEXAS - - - - - - - - - - - - - - -	------	100	5,300
MOUNTAIN - - - - - - - - - - - - - - -	------	400	1,000
ARIZONA - - - - - - - - - - - - - -	------	100	------
COLORADO - - - - - - - - - - - - -	------	------	500
IDAHO - - - - - - - - - - - - - - -	------	------	------
MONTANA - - - - - - - - - - - - - -	------	------	100
NEVADA - - - - - - - - - - - - - -	------	------	------
NEW MEXICO - - - - - - - - - - - -	------	200	200
UTAH - - - - - - - - - - - - - - -	------	100	------
WYOMING - - - - - - - - - - - - - -	------	------	200
PACIFIC - - - - - - - - - - - - - - - -	100	1,500	1,700
ALASKA - - - - - - - - - - - - - -	------	------	100
CALIFORNIA - - - - - - - - - - - -	100	1,300	1,600
HAWAII - - - - - - - - - - - - - -	------	------	------
OREGON - - - - - - - - - - - - - -	------	------	------
WASHINGTON - - - - - - - - - - - -	------	100	------
OUTLYING AREAS - - - - - - - - - - - - -	------	------	------
CANAL ZONE - - - - - - - - - - - -	------	------	------
GUAM - - - - - - - - - - - - - - -	------	------	------
PUERTO RICO - - - - - - - - - - - -	------	------	------
VIRGIN ISLANDS - - - - - - - - - -	------	------	------
FOREIGN - - - - - - - - - - - - - - - -	------	------	200

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES--CONTINUED

RACTERISTICS	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
CONTINUED							
RAL - - - - - - - - - - - -	------	300	100	------	700	500	500
- - - - - - - - - - - - -	------	200	------	------	200	200	100
- - - - - - - - - - - - -	------	------	------	------	100	100	100
- - - - - - - - - - - - -	------	------	100	------	100	------	100
- - - - - - - - - - - - -	------	------	------	------	400	200	200
RAL - - - - - - - - - - - -	------	100	8,700	------	1,300	500	1,200
- - - - - - - - - - - - -	------	------	100	------	100	------	------
- - - - - - - - - - - - -	------	------	1,500	------	300	100	100
- - - - - - - - - - - - -	------	------	1,800	------	200	100	200
- - - - - - - - - - - - -	------	100	5,300	------	700	300	800
- - - - - - - - - - - - -	------	400	1,000	------	700	300	900
- - - - - - - - - - - - -	------	100	------	------	300	------	300
- - - - - - - - - - - - -	------	------	500	------	200	100	300
- - - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - - -	------	------	100	------	------	------	------
- - - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - - -	------	200	200	------	------	------	100
- - - - - - - - - - - - -	------	100	------	------	------	------	100
- - - - - - - - - - - - -	------	------	200	------	------	------	------
- - - - - - - - - - - - -	100	1,500	1,700	200	2,000	1,600	2,500
- - - - - - - - - - - - -	------	------	100	------	------	------	------
- - - - - - - - - - - - -	100	1,300	1,600	200	1,400	1,200	2,100
- - - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - - -	------	------	------	------	200	100	100
- - - - - - - - - - - - -	------	100	------	------	300	300	200
- - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - -	------	------	------	------	------	------	------
DS - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - -	------	------	200	------	------	100	100

T ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TEC

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY B

BACHELO

GENERAL CHARACTERISTICS	TOTAL	TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL	ELE TRIC
TOTAL ENGINEERS REPORTING -	308,000	279,800	11,800	28,200	48,200	62,
HIGHEST DEGREE						
DOCTORATE - - - - - - -	24,500	21,900	900	4,500	2,900	3,
PROFESSIONAL MEDICAL - -	100	100	------	------	------	---
PROFESSIONAL ENGINEER -	13,200	4,900	200	400	1,100	
MASTER'S - - - - - - - -	71,100	67,600	3,700	7,500	11,400	14,
BACHELOR'S - - - - - - -	185,300	185,300	7,100	15,700	32,900	44,
LESS THAN BACHELOR'S - -	9,400	------	------	------	------	---
OTHER - - - - - - - - -	400	------	------	------	------	---
NO REPORT - - - - - - -	4,000	------	------	------	------	---
STUDENT STATUS						
FULL-TIME - - - - - - -	2,900	2,800	100	300	600	
PART-TIME - - - - - - -	11,700	11,000	700	1,000	1,500	2,
NO REPORT - - - - - - -	293,400	266,100	11,000	26,800	46,100	60,
PROFESSIONAL IDENTIFICATION						
ENGINEER - - - - - - - -	254,700	230,800	10,100	22,600	42,900	55,
ARCHITECT - - - - - - -	400	400	------	------	300	---
PHYSICIST - - - - - - -	1,200	1,100	------	100	------	
CHEMIST - - - - - - - -	1,000	900	------	700	------	---
GEOLOGIST - - - - - - -	2,600	2,500	------	------	------	---
MATHEMATICIAN - - - - -	300	300	------	100	------	
METALLURGIST - - - - - -	7,400	6,700	100	800	100	---
TECHNICIAN - - - - - - -	600	500	------	------	100	
OTHER - - - - - - - - -	30,900	28,600	1,200	3,100	3,300	5
NO REPORT - - - - - - -	8,800	8,000	300	800	1,500	1
REGISTERED ENGINEERS						
YES - - - - - - - - - -	131,100	118,100	2,400	8,600	33,800	24
NO - - - - - - - - - - -	171,400	156,800	9,300	19,000	13,700	37
NO REPORT - - - - - - -	5,400	4,900	200	600	700	1
PROFESSIONAL EMPLOY. STATUS						
PROFESSIONALLY EMPLOYED	293,600	268,400	11,500	27,100	45,400	60
SEEKING EMPLOYMENT - - -	2,000	1,800	100	200	300	
NOT SEEKING EMPLOYMENT -	10,700	8,300	100	700	2,200	1
NO REPORT - - - - - - -	1,600	1,400	------	200	300	

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGREE CURRICULA GROUPS

RISTICS	TOTAL	BACHELOR'S DEGREE CURRICULA GROUPS: TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM	NO REPORT OF BS DEGREE
PORTING -	308,000	279,800	11,800	28,200	48,200	62,800	20,400	60,500	10,300	13,800	22,200	1,500	28,100
- - - - -	24,500	21,900	900	4,500	2,900	3,000	1,200	4,000	1,800	800	2,600	200	2,500
DICAL - -	100	100	------	------	------	------	------	------	------	------	------	------	------
GINEER -	13,200	4,900	200	400	1,100	800	500	900	100	300	500	100	8,300
- - - - -	71,100	67,600	3,700	7,500	11,400	14,100	5,000	13,600	2,300	2,600	6,700	700	3,500
- - - - -	185,300	185,300	7,100	15,700	32,900	44,800	13,700	42,000	6,200	10,200	12,400	400	------
LOR'S - -	9,400	------	------	------	------	------	------	------	------	------	------	------	9,400
- - - - -	400	------	------	------	------	------	------	------	------	------	------	------	400
- - - - -	4,000	------	------	------	------	------	------	------	------	------	------	------	4,000
- - - - -	2,900	2,800	100	300	600	200	200	400	400	300	200	------	100
- - - - -	11,700	11,000	700	1,000	1,500	2,300	1,400	2,700	500	100	700	------	700
- - - - -	293,400	266,100	11,000	26,800	46,100	60,400	18,800	57,400	9,400	13,400	21,300	1,500	27,300
IFICATION													
- - - - -	254,700	230,800	10,100	22,600	42,900	55,000	15,600	51,800	4,600	9,400	17,600	1,200	23,900
- - - - -	400	400	------	------	300	------	------	------	------	------	------	------	------
- - - - -	1,200	1,100	------	100	------	300	200	100	------	------	300	------	100
- - - - -	1,000	900	------	700	------	------	------	------	------	------	100	------	100
- - - - -	2,600	2,500	------	------	------	------	------	------	------	2,200	100	------	100
- - - - -	300	300	------	100	------	100	------	100	------	------	100	------	------
- - - - -	7,400	6,700	100	800	100	------	400	300	4,500	200	400	100	700
- - - - -	600	500	------	------	100	100	100	100	------	------	100	------	200
- - - - -	30,900	28,600	1,200	3,100	3,300	5,900	3,500	6,300	900	1,500	2,800	200	2,200
- - - - -	8,800	8,000	300	800	1,500	1,400	600	1,900	300	400	700	100	800
RS													
- - - - -	131,100	118,100	2,400	8,600	33,800	24,700	5,900	27,200	2,000	5,400	7,200	900	13,000
- - - - -	171,400	156,800	9,300	19,000	13,700	37,100	14,000	32,500	8,100	8,200	14,500	600	14,600
- - - - -	5,400	4,900	200	600	700	1,100	500	800	200	300	500	------	500
Y. STATUS													
EMPLOYED	293,600	268,400	11,500	27,100	45,400	60,900	19,600	58,500	9,800	13,000	21,200	1,300	25,200
ENT - - -	2,000	1,800	100	200	300	200	200	400	100	100	200	------	300
LOYMENT -	10,700	8,300	100	700	2,200	1,500	500	1,400	300	600	800	200	2,400
- - - - -	1,600	1,400	------	200	300	200	100	300	100	100	100	------	200

NATIONAL REGISTER OF SCIENTIFIC AND T

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BACH

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GENERAL CHARACTERISTICS	TOTAL	TOTAL REPORT- ING BS DEGREE	AERO- SPACE	CHEMICAL	CIVIL
PRODUCTS OR SERVICES					
AGRICULTURE AND FOOD - -	4,000	3,800	100	700	400
AIRCRAFT AND SPACE - - -	33,000	30,800	7,400	1,200	1,400
CERAMICS - - - - - - - -	2,100	2,000	------	300	300
CHEMICALS, ALLIED PROD.	19,500	18,400	100	11,800	500
COMMUNICATIONS - - - - -	7,700	6,600	100	100	100
COMPUTERS - - - - - - -	11,000	10,300	200	500	500
CONSTRUCTION,CIVIL ENGR.	45,900	42,300	300	1,000	31,900
EDUC., INFORMATION SERV.	14,600	13,500	500	1,500	2,500
ELECTRICAL EQUIP., SERV.	19,200	17,100	200	400	300
ELECTRONIC EQUIP., SERV.	23,000	21,000	300	500	200
LAB-SCI-PHOTO-OPT EQUIP.	2,800	2,400	100	200	100
MACHINERY, MECH. EQUIP.	28,400	25,200	500	1,100	1,100
MARINE TRANSPORTATION -	4,800	4,200	200	100	400
MEDICAL, HEALTH SERVICES	1,300	1,200	------	200	100
METALS, BASIC - - - - -	12,600	11,500	200	1,500	400
METAL FABRICATED PROD. -	6,300	5,500	100	400	800
MINING - - - - - - - - -	5,900	5,000	------	200	300
MOTOR VEHICLE TRANS. - -	2,500	2,300	100	100	200
ORDNANCE - - - - - - - -	5,200	4,800	500	300	200
PETROLEUM - - - - - - -	15,500	14,600	200	3,000	800
RAILWAY, RAPID TRANSIT -	1,500	1,300	------	------	400
UTILITIES - - - - - - -	14,700	13,500	100	400	1,600
OTHER PRODUCTS, SERVICES	11,300	10,400	300	1,400	1,000
NO REPORT - - - - - - -	15,200	12,300	300	1,300	2,800
AREAS OF TECHNOLOGY					
BIOMEDICAL - - - - - - -	1,600	1,500	100	300	200
BEHAVIORAL AND SOCIAL -	4,100	3,800	100	900	500
CHEMICAL AND MATERIALS -	11,700	10,900	200	5,000	600
METALLURGICAL - - - - -	12,100	10,900	100	1,400	200
EARTH,ATMOSPHERE,MARINE	9,900	8,900	100	300	1,500
ENVIRONMENTAL,STRUCTURAL	33,700	31,100	1,000	1,100	20,600
ELECTROMAGNETIC - - - -	42,800	38,300	400	300	600
DYNAMICS AND MECHANICS -	40,100	36,600	4,300	1,600	2,500
HEAT,LIGHT,APPL. PHYSICS	8,500	7,300	400	1,000	200
NUCLEAR - - - - - - - -	2,600	2,400	100	400	100
ENGR.PROCESS-APPLICATION	32,100	29,400	900	5,600	8,900
AUTOMATION AND CONTROL -	12,400	11,300	400	900	400
WORK MGMT,EVALUATION - -	56,500	51,700	2,200	5,600	5,300
INFORMATION,MATHEMATICS	11,500	10,800	600	900	1,400
OTHER - - - - - - - - -	9,700	8,900	500	1,300	1,600
NO REPORT - - - - - - -	18,700	15,500	500	1,600	3,500

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RISTICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	TOTAL REPORTING BS DEGREE	AEROSPACE	CHEMICAL	CIVIL	ELECTRICAL	GENERAL	MECHANICAL	METALLURGICAL	MINERAL	OTHER	NO REPORT OF CURRICULUM	NO REPORT OF BS DEGREE
	BACHELOR'S DEGREE CURRICULA GROUPS											
4,000	3,800	100	700	400	200	400	600	------	------	1,600	------	200
33,000	30,800	7,400	1,200	1,400	5,200	2,700	9,400	700	200	2,300	200	2,200
2,100	2,000	------	300	300	200	200	400	200	100	300	------	100
19,500	18,400	100	11,800	500	800	1,000	2,600	300	200	1,100	100	1,100
7,700	6,600	100	100	100	4,600	500	500	------	------	600	------	1,100
11,000	10,300	200	500	500	5,300	1,200	1,300	100	200	900	100	700
45,900	42,300	300	1,000	31,900	1,300	1,200	3,500	100	700	2,100	200	3,600
14,600	13,500	500	1,500	2,500	2,100	1,100	3,500	400	500	1,300	100	1,100
19,200	17,100	200	400	300	11,600	1,000	2,600	200	------	800	100	2,100
23,000	21,000	300	500	200	14,100	1,600	1,900	200	------	2,100	100	2,000
2,800	2,400	100	200	100	700	300	700	------	------	200	------	400
28,400	25,200	500	1,100	1,100	1,700	2,100	15,300	500	400	2,200	100	3,200
4,800	4,200	200	100	400	400	500	1,500	100	------	1,000	------	600
1,300	1,200	------	200	100	200	200	300	------	------	100	------	100
12,600	11,500	200	1,500	400	600	1,000	1,400	5,100	300	800	100	1,200
6,300	5,500	100	400	800	300	800	2,100	800	100	300	------	700
5,900	5,000	------	200	300	200	100	200	300	3,400	200	------	1,000
2,500	2,300	100	100	200	300	300	900	200	------	200	------	200
5,200	4,800	500	300	200	1,400	500	1,600	100	------	400	------	300
15,500	14,600	200	3,000	800	700	500	2,200	100	6,300	700	100	900
1,500	1,300	------	------	400	300	100	400	------	------	100	------	200
14,700	13,500	100	400	1,600	7,000	500	3,000	100	200	600	100	1,300
11,300	10,400	300	1,400	1,000	1,400	1,900	2,500	200	300	1,200	100	900
15,200	12,300	300	1,300	2,800	2,200	900	2,200	600	800	1,100	200	2,900
1,600	1,500	100	300	200	300	100	300	------	------	300	------	100
4,100	3,800	100	900	500	500	300	600	100	500	500	------	300
11,700	10,900	200	5,000	600	500	500	1,600	1,300	200	800	100	800
12,100	10,900	100	1,400	200	200	500	900	6,400	500	700	100	1,200
9,900	8,900	100	300	1,500	500	300	800	100	4,500	900	------	1,000
33,700	31,100	1,000	1,100	20,600	800	1,100	3,700	------	500	2,200	200	2,600
42,800	38,300	400	300	600	30,400	1,300	2,600	100	100	2,300	200	4,500
40,100	36,600	4,300	1,600	2,500	1,600	2,200	21,100	200	500	2,400	200	3,500
8,500	7,800	400	1,000	200	1,400	600	3,100	200	100	800	100	600
2,600	2,400	100	400	100	300	200	900	100	------	200	------	100
32,100	29,400	900	5,600	8,900	2,800	1,400	4,200	400	2,800	2,300	100	2,700
12,400	11,300	400	900	400	5,000	900	2,400	100	100	1,000	100	1,100
56,500	51,700	2,200	5,600	5,300	10,700	8,200	12,100	700	1,900	4,800	200	4,900
11,500	10,800	600	900	1,400	3,900	1,100	1,700	100	300	900	------	700
9,700	8,900	500	1,300	1,600	1,200	700	1,800	100	700	1,000	------	800
18,700	15,500	500	1,600	3,500	2,700	1,100	2,900	600	1,100	1,400	200	3,200

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGRE

GENERAL CHARACTERISTICS	TOTAL	BACHELOR'S DEGREE					
		TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERA
TYPE OF EMPLOYER							
PRIV.INDUSTRY,BUSINESS -	211,100	192,600	7,800	22,600	21,800	48,500	14,50
SELF-EMPLOYED - - - - -	11,400	9,600	200	400	3,200	1,400	60
COLLEGE,UNIVERSITY - - -	20,200	18,600	900	2,000	3,600	2,600	1,20
JR.COLLEGE,TECH.INST. -	900	900	------	100	100	200	10
SEC.,ELEM.,OTHER SCHOOL	300	200	------	------	100	------	-----
NONPROFIT ORGANIZATION -	5,400	5,000	400	400	700	1,200	40
FEDERAL GOVERNMENT - - -	24,600	23,000	1,400	900	6,300	4,800	1,60
USPHS,MILITARY SERVICE -	4,900	4,700	500	200	1,300	300	70
STATE GOVERNMENT - - - -	5,900	5,500	------	100	4,300	200	10
LOCAL GOVERNMENT - - - -	4,800	4,400	------	100	3,000	600	10
OTHER - - - - - - - - -	4,600	4,100	200	300	1,200	1,000	20
NO REPORT - - - - - - -	14,000	11,200	300	1,100	2,600	2,000	80
FUNCTIONS							
DESIGN - - - - - - - - - -	53,600	48,800	1,900	3,000	12,100	13,300	2,10
DEVELOPMENT - - - - - -	32,300	30,200	2,100	4,300	1,800	8,800	1,80
RESEARCH - - - - - - - -	22,000	20,600	1,700	3,200	2,000	2,900	1,20
PRODUCTION - - - - - - -	56,600	51,400	1,100	5,400	7,900	10,600	4,10
CONTROL - - - - - - - -	104,700	94,800	3,600	8,800	17,700	21,100	8,70
TEACHING - - - - - - - -	14,700	13,600	600	1,400	2,700	2,000	1,00
OTHER - - - - - - - - -	6,200	5,700	400	600	700	1,300	70
NO REPORT - - - - - - -	17,900	14,800	500	1,500	3,100	2,800	1,00
SUPERVISORY LEVEL							
NO REG. SUPV. GIVEN - -	52,200	47,900	2,600	4,600	7,000	10,000	3,80
INDIRECT OR STAFF - - -	50,400	46,500	2,200	4,900	6,800	10,400	3,70
TEAM OR UNIT - - - - - -	33,900	31,400	1,700	3,400	4,600	8,500	2,10
PROJECT OR SECTION - - -	61,700	56,500	2,200	5,400	10,600	13,900	3,40
MAJOR DEPT.,DIV.,PROGRAM	56,900	51,500	1,700	5,700	8,600	11,700	4,10
GEN.MGMT OF ORGANIZATION	28,800	25,600	800	2,100	6,400	4,300	1,90
NO REPORT - - - - - - -	24,000	20,400	600	2,000	4,300	4,100	1,40

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STICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	TOTAL REPORTING BS DEGREE	BACHELOR'S DEGREE CURRICULA GROUPS										
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM	NO REPORT OF BS DEGREE
211,100	192,600	7,800	22,600	21,800	48,500	14,500	45,100	7,600	10,100	13,700	900	18,500
11,400	9,600	200	400	3,200	1,400	600	2,000	200	800	600	100	1,800
20,200	18,600	900	2,000	3,600	2,600	1,200	4,200	900	600	2,400	100	1,600
900	900	------	100	100	200	100	200	------	------	100	------	100
300	200	------	------	100	------	------	------	------	------	------	------	------
5,400	5,000	400	400	700	1,200	400	900	300	100	500	------	400
24,600	23,000	1,400	900	6,300	4,800	1,600	3,900	500	800	2,600	100	1,600
4,900	4,700	500	200	1,300	300	700	900	100	100	500	------	100
5,900	5,500	------	100	4,300	200	100	300	------	200	300	------	400
4,800	4,400	------	100	3,000	600	100	300	------	------	200	------	400
4,600	4,100	200	300	1,200	1,000	200	700	100	100	300	------	400
14,000	11,200	300	1,100	2,600	2,000	800	2,000	500	800	1,000	200	2,800
53,600	48,800	1,900	3,000	12,100	13,300	2,100	12,400	200	500	3,100	200	4,800
32,300	30,200	2,100	4,300	1,800	8,800	1,800	6,800	1,700	600	2,200	100	2,100
22,000	20,600	1,700	3,200	2,000	2,900	1,200	3,900	2,300	700	2,600	200	1,400
56,600	51,400	1,100	5,400	7,900	10,600	4,100	11,700	2,500	4,500	3,300	300	5,200
104,700	94,800	3,600	8,800	17,700	21,100	8,700	18,500	2,300	5,700	7,700	500	9,900
14,700	13,600	600	1,400	2,700	2,000	1,000	3,300	500	500	1,500	100	1,100
6,200	5,700	400	600	700	1,300	700	1,200	100	300	500	------	500
17,900	14,800	500	1,500	3,100	2,800	1,000	2,800	600	1,000	1,300	200	3,200
52,200	47,900	2,600	4,600	7,000	10,000	3,800	11,600	2,300	2,100	3,800	200	4,300
50,400	46,500	2,200	4,900	6,800	10,400	3,700	10,200	1,900	2,500	3,700	300	3,800
33,900	31,400	1,700	3,400	4,600	8,500	2,100	6,500	1,000	1,200	2,500	100	2,500
61,700	56,500	2,200	5,400	10,600	13,900	3,400	11,800	1,800	2,400	4,700	200	5,300
56,900	51,500	1,700	5,700	8,600	11,700	4,100	10,900	1,800	2,800	3,900	300	5,400
28,800	25,600	800	2,100	6,400	4,300	1,900	5,700	600	1,600	1,900	300	3,200
24,000	20,400	600	2,000	4,300	4,100	1,400	3,900	900	1,300	1,700	200	3,600

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CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGRE

GENERAL CHARACTERISTICS	TOTAL	BACHELOR'S DEGREE					
		TOTAL REPORT- ING BS DEGREE	AERO- SPACE	CHEMICAL	CIVIL	ELEC- TRICAL	GENERA
ALL GEOGRAPHIC LOCATIONS -	308,000	279,800	11,800	28,200	48,200	62,800	20,400
NEW ENGLAND - - - - - -	21,800	19,500	800	1,600	2,600	5,500	1,400
CONNECTICUT - - - - -	6,600	6,000	300	500	600	1,300	500
MAINE - - - - - - - -	700	600	------	100	200	100	------
MASSACHUSETTS - - - -	12,300	10,800	400	900	1,300	3,600	700
NEW HAMPSHIRE - - - -	900	800	------	100	100	200	100
RHODE ISLAND - - - -	1,000	900	------	100	200	200	100
VERMONT - - - - - - -	500	400	------	------	100	100	------
MIDDLE ATLANTIC - - - -	66,400	59,500	1,600	7,600	8,100	15,500	4,300
NEW JERSEY - - - - -	14,500	12,800	200	2,400	1,300	3,900	900
NEW YORK - - - - - -	29,200	26,000	900	3,000	4,000	6,700	1,900
PENNSYLVANIA - - - -	22,700	20,700	500	2,300	2,800	4,900	1,500
EAST NORTH CENTRAL - - -	52,200	47,200	1,400	4,900	7,200	10,400	3,400
ILLINOIS - - - - - -	14,800	13,300	200	1,400	2,600	2,900	900
INDIANA - - - - - - -	5,800	5,400	100	500	700	1,300	400
MICHIGAN - - - - - -	9,200	8,500	300	1,100	1,200	1,800	600
OHIO - - - - - - - -	17,500	15,400	800	1,600	1,600	3,300	1,300
WISCONSIN - - - - - -	5,000	4,600	100	300	1,000	1,100	200
WEST NORTH CENTRAL - - -	18,500	17,400	700	1,500	4,000	3,700	1,000
IOWA - - - - - - - -	2,800	2,600	100	200	500	700	200
KANSAS - - - - - - -	2,000	1,900	100	100	500	300	100
MINNESOTA - - - - - -	4,600	4,300	200	300	600	1,200	200
MISSOURI - - - - - -	7,000	6,500	300	900	1,600	1,200	400
NEBRASKA - - - - - -	1,500	1,400	------	------	500	200	100
NORTH DAKOTA - - - -	300	300	------	------	100	100	------
SOUTH DAKOTA - - - -	400	300	------	------	100	100	------
SOUTH ATLANTIC - - - - -	39,300	35,700	1,700	3,600	7,200	7,700	3,100
DELAWARE - - - - - -	2,100	1,900	------	700	200	300	100
DISTRICT OF COLUMBIA	5,900	5,300	300	200	1,200	1,100	600
FLORIDA - - - - - - -	6,700	5,900	400	300	1,100	1,500	500
GEORGIA - - - - - - -	3,100	3,000	200	200	700	600	400
MARYLAND - - - - - -	7,600	6,900	300	400	1,300	2,000	500
NORTH CAROLINA - - -	3,700	3,400	------	300	700	700	400
SOUTH CAROLINA - - -	2,000	1,800	100	200	400	200	100
VIRGINIA - - - - - -	6,300	5,800	400	500	1,300	1,300	300
WEST VIRGINIA - - - -	2,000	1,900	------	700	300	100	100

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S OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGREE CURRICULA GROUPS--CONTINUED

TAL	BACHELOR'S DEGREE CURRICULA GROUPS											
	TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM	NO REPORT OF BS DEGREE
000	279,800	11,800	28,200	48,200	62,800	20,400	60,500	10,300	13,800	22,200	1,500	28,100
800	19,500	800	1,600	2,600	5,500	1,400	4,800	700	200	1,700	100	2,400
600	6,000	300	500	600	1,300	500	1,900	300	100	400	100	600
700	600	------	100	200	100	------	100	------	------	100	------	100
300	10,800	400	900	1,300	3,600	700	2,400	300	100	1,000	------	1,500
900	800	------	100	100	200	100	200	------	------	100	------	100
000	900	------	100	200	200	100	200	------	------	100	------	100
500	400	------	------	100	100	------	100	------	------	------	------	------
400	59,500	1,600	7,600	8,100	15,500	4,300	13,300	3,100	1,400	4,200	400	6,900
500	12,800	200	2,400	1,300	3,900	900	2,900	400	100	700	100	1,700
200	26,000	900	3,000	4,000	6,700	1,900	5,700	1,000	600	2,000	200	3,200
700	20,700	500	2,300	2,800	4,900	1,500	4,700	1,700	700	1,500	100	2,000
200	47,200	1,400	4,900	7,200	10,400	3,400	11,600	3,400	1,000	3,600	300	5,100
800	13,300	200	1,400	2,600	2,900	900	3,100	600	400	1,200	100	1,500
800	5,400	100	500	700	1,300	400	1,300	400	100	600	------	400
200	8,500	300	1,100	1,200	1,800	600	2,100	600	200	500	------	700
500	15,400	800	1,600	1,600	3,300	1,300	3,800	1,600	200	1,100	100	2,100
000	4,600	100	300	1,000	1,100	200	1,400	100	100	300	------	400
500	17,400	700	1,500	4,000	3,700	1,000	3,500	400	800	1,700	------	1,200
800	2,600	100	200	500	700	200	600	------	------	400	------	100
000	1,900	100	100	500	300	100	400	------	200	200	------	200
600	4,300	200	300	600	1,200	200	900	200	200	400	------	300
000	6,500	300	900	1,600	1,200	400	1,200	100	200	400	------	500
500	1,400	------	------	500	200	100	400	------	------	200	------	100
300	300	------	------	100	100	------	100	------	------	------	------	------
400	300	------	------	100	100	------	100	------	100	------	------	------
300	35,700	1,700	3,600	7,200	7,700	3,100	7,300	700	900	3,300	200	3,600
100	1,900	------	700	200	300	100	500	------	------	100	------	200
900	5,300	300	200	1,200	1,100	600	900	100	200	600	100	500
700	5,900	400	300	1,100	1,500	500	1,300	100	200	400	------	900
100	3,000	200	200	700	600	400	500	------	------	300	------	200
600	6,900	300	400	1,300	2,000	500	1,500	100	------	800	------	700
700	3,400	------	300	700	700	400	800	------	------	300	------	300
000	1,800	100	200	400	200	100	500	------	------	200	------	200
300	5,800	400	500	1,300	1,300	300	1,100	100	100	600	------	500
000	1,900	------	700	300	100	100	300	100	200	100	------	100

NATIONAL REGISTER OF SCIENTIFIC AND

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BA

BAC

GENERAL CHARACTERISTICS	TOTAL	TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL
GEOGRAPHIC LOCATION, CONTINUED					
EAST SOUTH CENTRAL - - -	11,900	11,000	400	1,100	2,300
ALABAMA - - - - - - - -	4,000	3,800	200	400	600
KENTUCKY - - - - - - -	1,900	1,700	------	200	400
MISSISSIPPI - - - - - -	1,200	1,100	------	------	400
TENNESSEE - - - - - - -	4,800	4,400	200	500	900
WEST SOUTH CENTRAL - - -	29,500	27,400	1,000	4,000	3,900
ARKANSAS - - - - - - -	900	800	------	100	200
LOUISIANA - - - - - - -	5,100	4,600	100	700	900
OKLAHOMA - - - - - - -	4,300	4,000	100	500	500
TEXAS - - - - - - - - -	19,200	18,000	800	2,600	2,400
MOUNTAIN - - - - - - - -	14,800	13,200	300	800	2,800
ARIZONA - - - - - - - -	3,100	2,700	------	100	400
COLORADO - - - - - - -	4,800	4,300	200	300	1,000
IDAHO - - - - - - - - -	900	900	------	100	200
MONTANA - - - - - - - -	800	800	------	100	200
NEVADA - - - - - - - -	900	800	------	------	200
NEW MEXICO - - - - - -	2,000	1,800	100	100	300
UTAH - - - - - - - - -	1,600	1,500	------	100	300
WYOMING - - - - - - - -	500	400	------	------	100
PACIFIC - - - - - - - - -	50,700	46,400	3,800	2,800	9,200
ALASKA - - - - - - - -	600	500	------	------	200
CALIFORNIA - - - - - -	41,400	37,700	3,100	2,400	6,700
HAWAII - - - - - - - -	1,000	900	------	------	400
OREGON - - - - - - - -	1,700	1,600	------	------	600
WASHINGTON - - - - - -	6,000	5,600	600	300	1,300
OUTLYING AREAS - - - - -	500	500	------	------	300
CANAL ZONE - - - - - -	------	------	------	------	------
GUAM - - - - - - - - -	------	------	------	------	------
PUERTO RICO - - - - - -	500	500	------	------	300
VIRGIN ISLANDS - - - -	------	------	------	------	------
FOREIGN - - - - - - - - -	2,200	2,000	100	200	600

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CUR
ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENV
(COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING
ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATER
(METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MI
BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE,
PHYSICS, OTHER NONENGINEERING).

ARACTERISTICS OF ENGINEERS MEETING CRITERIA BY BACHELOR'S DEGREE CURRICULA GROUPS--CONTINUED

TICS	TOTAL	BACHELOR'S DEGREE CURRICULA GROUPS											
		TOTAL REPORT-ING BS DEGREE	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM	NO REPORT OF BS DEGREE
CONTINUED													
- - -	11,900	11,000	400	1,100	2,300	2,300	900	2,300	300	400	900	100	800
- - -	4,000	3,800	200	400	600	1,000	300	800	100	100	300	------	200
- - -	1,900	1,700	------	200	400	300	100	400	100	100	200	------	200
- - -	1,200	1,100	------	------	400	100	100	200	------	100	200	------	100
- - -	4,800	4,400	200	500	900	900	400	900	200	100	300	------	400
- - -	29,500	27,400	1,000	4,000	3,900	4,300	1,500	5,500	200	4,900	1,900	100	2,100
- - -	900	800	------	100	200	200	100	100	------	100	100	------	100
- - -	5,100	4,600	100	700	900	600	200	800	------	900	300	------	400
- - -	4,300	4,000	100	500	500	600	200	800	------	1,000	300	------	300
- - -	19,200	18,000	800	2,600	2,400	3,000	1,100	3,800	200	2,900	1,200	100	1,200
- - -	14,800	13,200	300	800	2,800	2,600	600	2,200	600	2,200	1,000	100	1,600
- - -	3,100	2,700	------	100	400	800	100	500	100	400	200	------	400
- - -	4,800	4,300	200	300	1,000	800	200	700	100	600	300	------	600
- - -	900	900	------	100	200	200	------	100	------	100	100	------	------
- - -	800	800	------	100	200	100	------	100	------	200	------	------	100
- - -	900	800	------	------	200	100	------	100	100	200	100	------	100
- - -	2,000	1,800	100	100	300	400	100	400	100	200	100	------	200
- - -	1,600	1,500	------	100	300	200	100	200	100	300	100	------	200
- - -	500	400	------	------	100	------	------	100	------	200	------	------	100
- - -	50,700	46,400	3,800	2,800	9,200	10,400	4,000	9,600	900	1,900	3,600	200	4,300
- - -	600	500	------	------	200	------	------	------	------	200	------	------	------
- - -	41,400	37,700	3,100	2,400	6,700	8,900	3,400	7,900	700	1,500	3,000	200	3,700
- - -	1,000	900	------	------	400	100	100	100	------	------	100	------	------
- - -	1,700	1,600	------	------	600	400	100	300	------	------	100	------	100
- - -	6,000	5,600	600	300	1,300	900	400	1,300	100	200	400	------	400
- - -	500	500	------	------	300	------	------	100	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------	------	------	------
- - -	500	500	------	------	300	------	------	100	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------	------	------	------	------
- - -	2,200	2,000	100	200	600	200	100	300	100	200	200	------	200

ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
, CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
S, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
IENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATION, CHEMISTRY,
NONENGINEERING).

NATIONAL REGISTER OF SCIENTIFIC AN

NUMBER OF ENGINEERS MEETING CRITERIA BY

FUNCTIONS	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.
ALL FUNCTIONS - - - - -	308,000	211,100	11,400	20,200	900
ADVISING, CONSULTATION - -	32,700	20,300	4,700	600	------
CONSTRUCTION, INSTALLATION	10,800	7,000	600	100	------
COORDINATION, LIAISON - - -	7,900	5,400	100	100	------
COST EST., BUDGET, PURCHASE	5,300	4,200	100	100	------
DESIGN - - - - - - - - - - -	53,000	40,600	2,300	600	------
DEVELOPMENT - - - - - - - - -	26,100	21,800	200	400	------
DRAFTING, DRAWING, GRAPHICS	600	300	------	100	------
EXPLORATION - - - - - - - - -	2,200	1,600	200	------	------
INFORMATION,DATA PROCESSING	3,500	2,300	100	100	------
PLANNING, DIRECTING - - - -	59,100	42,800	1,100	1,500	100
PRODUCTION, OPERATIONS - -	21,000	17,800	300	100	------
QUALITY ASSURANCE, CONTROL	4,800	4,000	------	------	------
RESEARCH - - - - - - - - - -	22,900	12,200	100	3,600	------
SALES, TECHNICAL SERVICES -	19,200	17,300	1,300	------	------
SPECIFYING - - - - - - - - -	1,500	1,100	------	------	------
TEACHING, INSTRUCTING - - -	15,300	800	100	12,200	700
TESTING, EVALUATION - - - -	6,900	4,600	------	100	------
FULL-TIME STUD., NO PROFILE	500	------	------	100	------
RETIRED, NO PROFILE - - - -	3,100	------	------	------	------
OTHER - - - - - - - - - - - -	6,500	4,500	100	200	------
NO REPORT - - - - - - - - - -	4,900	2,400	300	300	------

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND TYPES OF EMPLOYER

TYPES OF EMPLOYER

TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
308,000	211,100	11,400	20,200	900	300	5,400	24,600	4,900	5,900	4,800	4,600	14,000
32,700	20,300	4,700	600	------	------	1,000	2,300	300	600	300	700	1,900
10,800	7,000	600	100	------	------	------	800	300	800	300	300	400
7,900	5,400	100	100	------	------	100	1,000	400	300	200	200	200
5,300	4,200	100	100	------	------	------	400	100	100	100	100	200
53,000	40,600	2,300	600	------	------	300	4,100	200	1,400	1,200	800	1,400
26,100	21,800	200	400	------	------	500	2,000	300	100	100	200	500
600	300	------	100	------	------	------	------	------	------	------	------	100
2,200	1,600	200	------	------	------	------	200	------	------	------	------	100
3,500	2,300	100	100	------	------	200	500	100	100	100	100	100
59,100	42,800	1,100	1,500	100	------	1,200	5,500	1,400	1,400	1,700	900	1,500
21,000	17,800	300	100	------	------	100	1,000	400	200	200	300	500
4,800	4,000	------	------	------	------	100	400	100	100	100	------	100
22,900	12,200	100	3,600	------	------	1,400	4,000	200	200	------	300	800
19,200	17,300	1,300	------	------	------	------	------	------	------	------	300	300
1,500	1,100	------	------	------	------	------	200	------	------	------	------	------
15,300	800	100	12,200	700	200	100	200	400	100	------	------	600
6,900	4,600	------	100	------	------	100	1,000	300	300	200	100	100
500	------	------	100	------	------	------	------	------	------	------	------	400
3,100	------	------	------	------	------	------	------	------	------	------	------	3,100
6,500	4,500	100	200	------	------	200	700	300	100	100	100	300
4,900	2,400	300	300	------	------	100	200	100	100	100	100	1,300

TOTAL BECAUSE OF ROUNDING.

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NUMBER OF ENGINEERS MEETING CRITERIA B

FUNCTIONS	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL
ALL FUNCTIONS - - - - -	308,000	1,600	4,100
ADVISING, CONSULTATION - -	32,700	200	600
CONSTRUCTION, INSTALLATION	10,800	------	------
COORDINATION, LIAISON - - -	7,900	------	100
COST EST., BUDGET, PURCHASE	5,300	------	200
DESIGN - - - - - - - - - -	53,000	100	100
DEVELOPMENT - - - - - - - -	26,100	100	100
DRAFTING, DRAWING, GRAPHICS	600	------	------
EXPLORATION - - - - - - - -	2,200	------	------
INFORMATION,DATA PROCESSING	3,500	------	100
PLANNING, DIRECTING - - - -	59,100	300	1,000
PRODUCTION, OPERATIONS - -	21,000	------	------
QUALITY ASSURANCE, CONTROL	4,800	------	------
RESEARCH - - - - - - - - -	22,900	500	100
SALES, TECHNICAL SERVICES -	19,200	------	100
SPECIFYING - - - - - - - -	1,500	------	------
TEACHING, INSTRUCTING - - -	15,300	200	1,400
TESTING, EVALUATION - - - -	6,900	------	------
FULL-TIME STUD., NO PROFILE	500	------	------
RETIRED, NO PROFILE - - - -	3,100	------	------
OTHER - - - - - - - - - - -	6,500	------	100
NO REPORT - - - - - - - - -	4,900	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND AREAS OF TECHNOLOGY

	TOTAL	AREAS OF TECHNOLOGY							
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
-	308,000	1,600	4,100	11,700	12,100	9,900	33,700	42,800	40,100
-	32,700	200	600	1,200	900	1,500	4,500	3,900	3,200
N	10,800	------	------	200	------	200	2,900	1,500	1,200
-	7,900	------	100	200	100	200	800	900	700
SE	5,300	------	200	100	100	100	400	500	300
-	53,000	100	100	900	200	700	9,500	9,900	9,700
-	26,100	100	100	1,700	1,400	400	1,000	4,700	4,300
CS	600	------	------	------	------	------	100	------	------
-	2,200	------	------	------	------	1,400	100	100	100
NG	3,500	------	100	100	100	200	300	300	200
-	59,100	300	1,000	1,500	1,600	2,200	6,200	9,100	5,900
-	21,000	------	------	900	1,300	900	800	2,800	1,900
	4,800	------	------	200	900	------	200	300	100
-	22,900	500	100	1,900	3,000	900	1,900	1,800	4,600
-	19,200	------	100	1,700	1,000	400	1,900	3,700	2,800
-	1,500	------	------	100	100	------	100	200	200
-	15,300	200	1,400	600	700	400	2,000	1,300	3,500
-	6,900	------	------	300	500	100	600	700	600
LE	500	------	------	------	------	------	------	------	------
-	3,100	------	------	------	------	------	------	------	------
-	6,500	------	100	200	100	100	600	900	500
-	4,900	------	------	100	100	100	200	200	200

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND AR

FUNCTIONS	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	W MA MEN EVAL
	AREAS OF TECHNO				
ALL FUNCTIONS - - - - -	8,500	2,600	32,100	12,400	56,
ADVISING, CONSULTATION - -	700	200	4,000	700	6,
CONSTRUCTION, INSTALLATION	100	100	1,900	300	1,
COORDINATION, LIAISON - - -	100	100	1,100	300	2,
COST EST., BUDGET, PURCHASE	100	------	500	100	2,
DESIGN - - - - - - - - - -	1,300	500	6,800	2,500	6,
DEVELOPMENT - - - - - - - -	1,300	400	2,800	1,600	3,
DRAFTING, DRAWING, GRAPHICS	------	------	------	------	
EXPLORATION - - - - - - - -	100	------	200	------	
INFORMATION,DATA PROCESSING	100	------	200	100	
PLANNING, DIRECTING - - - -	1,100	500	7,300	1,900	14,
PRODUCTION, OPERATIONS - -	200	200	2,400	600	7,
QUALITY ASSURANCE, CONTROL	100	------	200	100	2,
RESEARCH - - - - - - - - -	1,600	200	1,300	800	1,
SALES, TECHNICAL SERVICES -	800	100	1,200	2,000	1,
SPECIFYING - - - - - - - -	------	------	100	100	
TEACHING, INSTRUCTING - - -	800	200	1,000	400	1,
TESTING, EVALUATION - - - -	100	100	400	500	2,
FULL-TIME STUD., NO PROFILE	------	------	------	------	---
RETIRED, NO PROFILE - - - -	------	------	------	------	---
OTHER - - - - - - - - - - -	100	100	700	200	1,
NO REPORT - - - - - - - - -	100	------	100	100	

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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R OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY

HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
8,500	2,600	32,100	12,400	56,500	11,500	9,700	18,700
700	200	4,000	700	6,200	1,200	1,200	2,300
100	100	1,900	300	1,500	100	400	600
100	100	1,100	300	2,300	200	300	300
100	------	500	100	2,400	100	300	200
1,300	500	6,800	2,500	6,000	2,300	600	1,900
1,300	400	2,800	1,600	3,700	1,300	600	700
------	------	------	------	100	200	------	100
100	------	200	------	100	------	------	200
100	------	200	100	600	1,100	200	100
1,100	500	7,300	1,900	14,500	1,800	2,400	2,000
200	200	2,400	600	7,900	200	400	600
100	------	200	100	2,400	100	100	100
1,600	200	1,300	800	1,700	900	700	1,100
800	100	1,200	2,000	1,400	600	900	600
------	------	100	100	600	------	------	------
800	200	1,000	400	1,000	900	400	700
100	100	400	500	2,500	200	100	200
------	------	------	------	------	------	------	500
------	------	------	------	------	------	------	3,100
100	100	700	200	1,200	200	1,000	400
100	------	100	100	300	100	100	3,200

TOTAL BECAUSE OF ROUNDING.

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NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND

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FUNCTIONS	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS
ALL FUNCTIONS	308,000	4,000	33,000	2,100
ADVISING, CONSULTATION	32,700	400	2,700	200
CONSTRUCTION, INSTALLATION	10,800	100	100	------
COORDINATION, LIAISON	7,900	100	1,000	------
COST EST., BUDGET, PURCHASE	5,300	100	200	------
DESIGN	53,000	400	6,000	100
DEVELOPMENT	26,100	300	5,000	300
DRAFTING, DRAWING, GRAPHICS	600	------	------	------
EXPLORATION	2,200	------	100	------
INFORMATION,DATA PROCESSING	3,500	------	300	------
PLANNING, DIRECTING	59,100	800	6,800	400
PRODUCTION, OPERATIONS	21,000	500	900	300
QUALITY ASSURANCE, CONTROL	4,800	------	700	100
RESEARCH	22,900	800	4,600	300
SALES, TECHNICAL SERVICES	19,200	100	600	200
SPECIFYING	1,500	------	200	------
TEACHING, INSTRUCTING	15,300	200	600	100
TESTING, EVALUATION	6,900	------	1,600	------
FULL-TIME STUD., NO PROFILE	500	------	------	------
RETIRED, NO PROFILE	3,100	------	------	------
OTHER	6,500	100	1,100	------
NO REPORT	4,900	100	300	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND PRODUCTS OR SERVICES

S	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
- - - - - - - - - -	308,000	4,000	33,000	2,100	19,500	7,700	11,000	45,900	14,600
- - - - - - - - - -	32,700	400	2,700	200	1,600	800	1,100	6,700	500
N - - - - - - - - -	10,800	100	100	------	300	100	100	6,300	------
- - - - - - - - - -	7,900	100	1,000	------	500	300	300	1,700	100
SE - - - - - - - - -	5,300	100	200	------	600	200	100	1,300	------
- - - - - - - - - -	53,000	400	6,000	100	2,700	1,200	2,000	13,100	100
- - - - - - - - - -	26,100	300	5,000	300	3,000	900	1,500	700	100
CS - - - - - - - - -	600	------	------	------	------	------	------	100	100
- - - - - - - - - -	2,200	------	100	------	------	------	------	100	------
NG - - - - - - - - -	3,500	------	300	------	100	100	900	400	300
- - - - - - - - - -	59,100	800	6,800	400	3,500	2,100	2,200	9,100	1,300
- - - - - - - - - -	21,000	500	900	300	3,000	600	400	900	100
L - - - - - - - - -	4,800	------	700	100	200	200	200	200	------
- - - - - - - - - -	22,900	800	4,600	300	1,600	400	600	1,500	800
- - - - - - - - - -	19,200	100	600	200	1,100	200	800	900	------
- - - - - - - - - -	1,500	------	200	------	100	100	100	200	------
- - - - - - - - - -	15,300	200	600	100	200	100	200	800	10,800
- - - - - - - - - -	6,900	------	1,600	------	200	100	200	600	------
LE - - - - - - - - -	500	------	------	------	------	------	------	------	------
- - - - - - - - - -	3,100	------	------	------	------	------	------	------	------
- - - - - - - - - -	6,500	100	1,100	------	500	200	300	600	200
- - - - - - - - - -	4,900	100	300	------	200	100	100	500	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICA

NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND PR

PR

FUNCTIONS	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHI MECHA EQUI
ALL FUNCTIONS	19,200	23,000	2,800	28,
ADVISING, CONSULTATION	2,000	1,600	200	2,
CONSTRUCTION, INSTALLATION	700	200	------	
COORDINATION, LIAISON	400	600	------	
COST EST., BUDGET, PURCHASE	200	300	------	
DESIGN	4,400	4,700	400	6,
DEVELOPMENT	1,600	4,100	400	2,
DRAFTING, DRAWING, GRAPHICS	------	------	------	
EXPLORATION	------	------	------	---
INFORMATION,DATA PROCESSING	100	200	------	
PLANNING, DIRECTING	3,300	4,700	600	4,
PRODUCTION, OPERATIONS	1,300	1,000	100	1,
QUALITY ASSURANCE, CONTROL	300	600	100	
RESEARCH	700	1,700	400	1,
SALES, TECHNICAL SERVICES	2,900	1,500	400	5,
SPECIFYING	100	200	------	
TEACHING, INSTRUCTING	100	200	------	
TESTING, EVALUATION	500	600	100	
FULL-TIME STUD., NO PROFILE	------	------	------	---
RETIRED, NO PROFILE	------	------	------	---
OTHER	400	500	------	
NO REPORT	300	200	------	

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BER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELECTRICAL EQUIPMENT, SERVICES	ELECTRONIC EQUIPMENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANSPORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - - - - - - -	19,200	23,000	2,800	28,400	4,800	1,300	12,600	6,300	5,900
- - - - - - - - - -	2,000	1,600	200	2,900	400	200	1,000	500	800
- - - - - - - - - -	700	200	------	900	100	------	100	100	100
- - - - - - - - - -	400	600	------	500	200	------	200	100	100
E - - - - - - - - -	200	300	------	400	100	------	200	100	100
- - - - - - - - - -	4,400	4,700	400	6,900	1,300	200	600	900	300
- - - - - - - - - -	1,600	4,100	400	2,300	300	100	1,100	600	200
S - - - - - - - - -	------	------	------	100	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	100	------	900
G - - - - - - - - -	100	200	------	100	------	------	100	100	------
- - - - - - - - - -	3,300	4,700	600	4,600	1,100	300	2,000	1,500	1,300
- - - - - - - - - -	1,300	1,000	100	1,600	300	100	1,600	600	900
- - - - - - - - - -	300	600	100	200	100	------	900	100	100
- - - - - - - - - -	700	1,700	400	1,100	300	200	2,800	400	500
- - - - - - - - - -	2,900	1,500	400	5,100	100	------	1,100	800	200
- - - - - - - - - -	100	200	------	200	------	------	------	------	------
- - - - - - - - - -	100	200	------	300	100	100	300	------	100
- - - - - - - - - -	500	600	100	500	100	------	400	100	100
E - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	400	500	------	400	100	------	100	100	100
- - - - - - - - - -	300	200	------	300	------	------	200	100	100

NATIONAL REGISTER OF SCI

NUMBER OF ENGINEERS MEETING CRITERIA

FUNCTIONS	MOTOR VEHICLE TRANS- PORTATION	ORDN
ALL FUNCTIONS	2,500	5,
ADVISING, CONSULTATION	200	
CONSTRUCTION, INSTALLATION	------	---
COORDINATION, LIAISON	100	
COST EST., BUDGET, PURCHASE	------	
DESIGN	300	
DEVELOPMENT	400	
DRAFTING, DRAWING, GRAPHICS	------	---
EXPLORATION	------	---
INFORMATION,DATA PROCESSING	------	
PLANNING, DIRECTING	500	1,
PRODUCTION, OPERATIONS	200	
QUALITY ASSURANCE, CONTROL	100	
RESEARCH	200	
SALES, TECHNICAL SERVICES	100	
SPECIFYING	------	---
TEACHING, INSTRUCTING	100	---
TESTING, EVALUATION	200	
FULL-TIME STUD., NO PROFILE	------	---
RETIRED, NO PROFILE	------	---
OTHER	100	
NO REPORT	------	---

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND PRODUCTS OR SERVICES--CONTINUED

FUNCTIONS	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
	PRODUCTS OR SERVICES						
- - - - - - - - - - - - - - -	2,500	5,200	15,500	1,500	14,700	11,300	15,200
TATION - - - - - - - - - - -	200	300	2,600	200	1,300	2,600	2,000
STALLATION - - - - - - - - -	------	------	300	------	700	100	400
AISON - - - - - - - - - - - -	100	200	500	100	400	300	200
T, PURCHASE - - - - - - - - -	------	100	400	------	300	300	200
- - - - - - - - - - - - - - -	300	700	1,300	300	2,600	700	1,600
- - - - - - - - - - - - - - -	400	900	800	100	400	600	600
G, GRAPHICS - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - - -	------	------	600	------	------	------	200
PROCESSING - - - - - - - - -	------	100	100	------	100	200	100
ING - - - - - - - - - - - - -	500	1,200	3,400	400	4,100	2,500	1,600
ATIONS - - - - - - - - - - -	200	300	2,700	100	2,200	900	500
E, CONTROL - - - - - - - - -	100	300	------	------	200	100	100
- - - - - - - - - - - - - - -	200	400	1,000	------	300	900	1,000
SERVICES - - - - - - - - - -	100	100	900	------	1,100	500	300
- - - - - - - - - - - - - - -	------	------	------	------	100	100	100
CTING - - - - - - - - - - - -	100	------	100	------	100	200	700
ION - - - - - - - - - - - - -	200	300	200	------	300	400	200
NO PROFILE - - - - - - - - -	------	------	------	------	------	------	500
ILE - - - - - - - - - - - - -	------	------	------	------	------	------	3,100
- - - - - - - - - - - - - - -	100	200	400	------	400	600	300
- - - - - - - - - - - - - - -	------	------	300	------	100	200	1,500

Y NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PER

NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND HIGHEST

FUNCTIONS	TOTAL	HIGHEST DEGREE C				
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENE
ALL FUNCTIONS - - - - - - - - -	308,000	13,100	26,600	48,600	65,500	26,
ADVISING, CONSULTATION - - - - -	32,700	1,000	2,200	6,300	5,600	3,
CONSTRUCTION, INSTALLATION - - -	10,800	200	200	5,100	1,600	
COORDINATION, LIAISON - - - - - -	7,900	400	600	1,800	1,400	
COST EST., BUDGET, PURCHASE - - -	5,300	100	400	1,100	800	
DESIGN - - - - - - - - - - - - -	53,000	2,000	2,900	12,400	13,900	2,
DEVELOPMENT - - - - - - - - - - -	26,100	1,700	3,900	1,100	7,400	1,
DRAFTING, DRAWING, GRAPHICS - - -	600	------	------	200	100	---
EXPLORATION - - - - - - - - - - -	2,200	100	100	100	100	---
INFORMATION,DATA PROCESSING - - -	3,500	100	300	500	800	
PLANNING, DIRECTING - - - - - - -	59,100	2,400	4,800	8,800	14,000	5,
PRODUCTION, OPERATIONS - - - - -	21,000	400	3,000	1,400	4,300	2,
QUALITY ASSURANCE, CONTROL - - -	4,800	200	400	300	1,100	
RESEARCH - - - - - - - - - - - -	22,900	2,100	3,000	1,900	3,000	2,
SALES, TECHNICAL SERVICES - - - -	19,200	500	1,700	1,500	4,300	1,
SPECIFYING - - - - - - - - - - -	1,500	100	100	100	400	
TEACHING, INSTRUCTING - - - - - -	15,300	700	1,300	2,800	1,900	2,
TESTING, EVALUATION - - - - - - -	6,900	600	400	800	1,800	
FULL-TIME STUD., NO PROFILE - - -	500	------	100	100	------	
RETIRED, NO PROFILE - - - - - - -	3,100	------	100	800	500	
OTHER - - - - - - - - - - - - - -	6,500	400	500	700	1,500	
NO REPORT - - - - - - - - - - - -	4,900	200	500	800	1,100	

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFI
ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SAN
(COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENG
ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANIC
(METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING,
BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEER
PHYSICS, OTHER NONENGINEERING).

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NUMBER OF ENGINEERS MEETING CRITERIA BY FUNCTIONS AND HIGHEST DEGREE CURRICULA GROUPS

	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
- - - - - -	308,000	13,100	26,600	48,600	65,500	26,300	58,500	12,800	15,400	34,300	6,800
- - - - - -	32,700	1,000	2,200	6,300	5,600	3,100	5,300	1,200	2,800	4,000	1,20C
ION - - -	10,800	2C0	200	5,100	1,600	400	1,900	------	200	700	40C
- - - - - -	7,900	4C0	600	1,800	1,400	700	1,400	200	200	1,100	10C
HASE - - -	5,300	1C0	400	1,100	800	700	900	100	300	700	10C
- - - - - -	53,000	2,0C0	2,900	12,400	13,900	2,900	12,500	30C	500	4,20C	1,40C
- - - - - -	26,100	1,700	3,900	1,100	7,400	1,900	5,30C	1,600	500	2,600	20C
HICS - - -	6C0	------	------	200	100	------	100	------	------	100	------
- - - - - -	2,200	100	100	1C0	100	------	100	------	1,500	10C	------
SING - - -	3,500	100	300	500	800	400	500	100	200	600	------
- - - - - -	59,1C0	2,4C0	4,800	8,800	14,000	5,400	10,200	1,500	3,100	7,500	1,300
- - - - - -	21,000	4C0	3,000	1,4C0	4,300	2,000	4,100	1,10C	2,400	2,00C	50C
ROL - - -	4,800	200	400	3C0	1,100	400	700	900	100	600	10C
- - - - - -	22,900	2,100	3,000	1,900	3,000	2,400	3,100	3,100	800	3,200	10C
ES - - - -	19,200	500	1,700	1,500	4,300	1,800	5,300	900	900	2,000	40C
- - - - - -	1,500	10C	100	1C0	400	100	400	100	------	20C	------
- - - - - -	15,300	700	1,300	2,800	1,900	2,200	2,800	700	500	2,300	100
- - - - - -	6,900	6C0	400	800	1,800	400	1,400	50C	200	700	10C
FILE - - -	500	------	100	100	------	100	------	100	100	------	------
- - - - - -	3,100	------	100	800	500	200	500	100	200	200	50C
- - - - - -	6,500	400	500	700	1,500	700	1,100	100	300	1,00C	100
- - - - - -	4,900	2C0	500	8C0	1,100	300	900	200	400	5C0	100

DD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTICN, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
NCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATICN, CHEMISTRY,
NONENGINEERING).

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNO

TYPE

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL
ALL AREAS OF TECHNOLOGY	308,000	211,100	11,400	20,200	900	300
BIOMEDICAL - - - - - - -	1,700	600	100	500	------	------
AQUACULTURE - - - - - - - -	------	------	------	------	------	------
BIOCHEMISTRY - - - - - - -	100	------	------	------	------	------
BIOENGINEERING - - - - - -	700	200	------	300	------	------
BIOLOGICAL APPLICATIONS - -	100	------	------	100	------	------
BIOMECHANICS - - - - - - -	100	------	------	100	------	------
BIONICS,MEDICAL ELECTRONICS	100	100	------	------	------	------
HEALTH PHYSICS - - - - - -	------	------	------	------	------	------
INDUSTRIAL HEALTH - - - - -	100	------	------	------	------	------
LIFE SUPPORT - - - - - - -	100	100	------	------	------	------
MEDICAL APPLICATIONS - - -	200	100	------	------	------	------
PHYSIOLOGY - - - - - - - -	------	------	------	------	------	------
PUBLIC HEALTH - - - - - - -	200	------	------	------	------	------
BEHAVIORAL AND SOCIAL -	4,300	2,000	100	1,300	300	100
ECONOMICS - - - - - - - - -	1,900	1,500	------	100	------	------
EDUCATIONAL TECHNOLOGY - -	2,000	200	------	1,100	300	100
HISTORY (TECHNOLOGICAL) - -	100	------	------	------	------	------
HUMAN FACTORS - - - - - - -	300	200	------	------	------	------
PSYCHOLOGY - - - - - - - -	------	------	------	------	------	------
CHEMICAL AND MATERIALS -	12,400	9,300	300	1,000	------	------
CHEMICAL APPLICATIONS - - -	4,800	3,900	100	300	------	------
COMBUSTION, FUELS - - - - -	1,000	700	------	100	------	------
COATING, PLATING, CLADDING	400	300	------	------	------	------
CORROSION - - - - - - - - -	400	300	------	------	------	------
CRYSTALS, CRYSTALLOGRAPHY -	100	100	------	------	------	------
ELECTROCHEMISTRY - - - - -	300	300	------	------	------	------
FILAMENT TECHNOLOGY - - - -	200	200	------	------	------	------
FUEL CELLS - - - - - - - -	100	100	------	------	------	------
MATERIAL APPLICATIONS - - -	3,600	2,800	100	100	------	------
MATERIAL PROPERTIES - - - -	1,400	700	------	400	------	------
THERMOCHEMISTRY - - - - - -	100	------	------	------	------	------
METALLURGICAL - - - - -	12,900	9,800	200	1,100	------	------
BENEFICIATION, ORE PROCESS.	600	500	------	------	------	------
CASTING - - - - - - - - - -	400	400	------	------	------	------
METALLURGY (GENERAL) - - -	4,300	3,200	100	300	------	------
METALLURGY, EXTRACTIVE - -	1,200	900	100	100	------	------
METALLURGY, PHYSICAL - - -	3,000	1,900	------	600	------	------
METALLURGY, POWDER - - - -	400	300	------	------	------	------
METALLURGY, PROCESS - - - -	2,300	2,000	------	100	------	------
WELDING - - - - - - - - - -	600	500	------	------	------	------

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BER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER

	TYPES OF EMPLOYER												
TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
308,000	211,100	11,400	20,200	900	300	5,400	24,600	4,900	5,900	4,800	4,600	14,000
1,700	600	100	500	------	------	100	200	100	------	------	------	100
------	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
700	200	------	300	------	------	100	100	------	------	------	------	100
100	------	------	100	------	------	------	------	------	------	------	------	------
100	------	------	100	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------	------
4,300	2,000	100	1,300	300	100	100	100	100	100	------	------	200
1,900	1,500	------	100	------	------	------	100	------	------	------	------	------
2,000	200	------	1,100	300	100	------	------	------	------	------	------	100
100	------	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
12,400	9,300	300	1,000	------	------	200	600	------	100	------	200	600
4,800	3,900	100	300	------	------	100	100	------	------	------	------	300
1,000	700	------	100	------	------	------	100	------	------	------	100	100
400	300	------	------	------	------	------	------	------	------	------	------	------
400	300	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
3,600	2,800	100	100	------	------	100	200	------	------	------	------	100
1,400	700	------	400	------	------	100	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
12,900	9,800	200	1,100	------	------	300	600	100	------	------	100	800
600	500	------	------	------	------	------	------	------	------	------	------	------
400	400	------	------	------	------	------	------	------	------	------	------	------
4,300	3,200	100	300	------	------	100	100	------	------	------	100	300
1,200	900	100	100	------	------	------	100	------	------	------	------	100
3,000	1,900	------	600	------	------	100	200	------	------	------	------	100
400	300	------	------	------	------	------	------	------	------	------	------	------
2,300	2,000	------	100	------	------	------	100	------	------	------	------	100
600	500	------	------	------	------	------	100	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECH

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNO

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC. ELEM. OTHER SCHO
AREAS OF TECHNOLOGY, CONTINUED						
EARTH, ATMOSPHERE, MARINE	10,800	6,300	700	700	------	----
ATMOSPHERIC SCIENCES - - -	200	------	------	------	------	----
DESALTING - - - - - - - - -	200	100	------	------	------	----
EARTH SCIENCES - - - - - -	900	600	100	100	------	----
GEOCHEMISTRY - - - - - - -	100	------	------	------	------	----
GEODESY - - - - - - - - - -	100	------	------	------	------	----
GEOLOGY - - - - - - - - - -	2,700	1,600	300	200	------	----
GEOPHYSICS - - - - - - - -	400	300	------	------	------	----
HYDROGRAPHY - - - - - - - -	------	------	------	------	------	----
HYDROLOGY - - - - - - - - -	1,000	100	------	100	------	----
MARINE SCIENCES - - - - - -	900	500	------	100	------	----
MINING, SURFACE - - - - - -	1,300	900	100	------	------	----
MINING, UNDERGROUND - - - -	1,900	1,300	100	------	------	----
MINING, UNDERWATER - - - -	100	------	------	------	------	----
OCEANOGRAPHY - - - - - - -	300	100	------	------	------	----
OFFSHORE OPERATIONS - - - -	600	500	------	------	------	----
UNDERWATER TECHNOLOGY - - -	200	100	------	------	------	----
ENVIRONMENTAL, STRUCTURAL	35,900	17,000	3,000	2,700	100	----
AIR POLLUTION - - - - - - -	900	500	100	100	------	----
CONCRETE TECHNOLOGY - - - -	1,400	800	100	100	------	----
CONSERVATION, RECLAMATION -	700	100	------	------	------	----
DRAINAGE, IRRIGATION - - -	900	200	100	100	------	----
ENVIRONMENTAL CONTROL - - -	3,500	2,500	400	100	------	----
ENVIRONMENTAL FACTORS - - -	300	200	------	------	------	----
NOISE REDUCTION - - - - - -	200	100	------	------	------	----
PHOTOGRAMMETRY - - - - - -	100	100	------	------	------	----
POLLUTION - - - - - - - - -	300	200	------	------	------	----
PUBLIC SAFETY - - - - - - -	200	------	------	------	------	----
ROCK MECHANICS - - - - - -	200	100	------	------	------	----
SANITARY ENGINEERING - - -	2,900	1,300	300	300	------	----
SOILS - - - - - - - - - - -	1,600	600	100	300	------	----
SOLID WASTE - - - - - - - -	100	------	------	------	------	----
STRUCTURES - - - - - - - -	13,300	7,000	1,300	1,000	------	----
SURVEYING, MAPPING - - - -	900	300	200	100	------	----
TRAFFIC - - - - - - - - - -	500	100	------	------	------	----
TRANSPORTATION - - - - - -	3,800	1,400	100	200	------	----
WASTE DISPOSAL - - - - - -	500	300	------	------	------	----
WATER POLLUTION - - - - - -	900	400	------	100	------	----
WATER RESOURCES AND SUPPLY	2,700	700	100	200	------	----

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F ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

ED

TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
10,800	6,300	700	700	------	------	100	1,600	100	200	100	100	900
200	------	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
900	600	100	100	------	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
2,700	1,600	300	200	------	------	------	100	------	100	------	------	300
400	300	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
1,000	100	------	100	------	------	------	700	------	------	------	------	------
900	500	------	100	------	------	------	100	100	------	------	------	------
1,300	900	100	------	------	------	------	100	------	------	------	------	100
1,900	1,300	100	------	------	------	------	100	------	------	------	------	200
100	------	------	------	------	------	------	------	------	------	------	------	------
300	100	------	------	------	------	------	100	------	------	------	------	------
600	500	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	100	------	------	------	------	------
35,900	17,000	3,000	2,700	100	------	600	4,200	500	2,900	1,900	700	2,200
900	500	100	100	------	------	------	100	------	------	100	------	------
1,400	800	100	100	------	------	100	100	------	100	------	------	100
700	100	------	------	------	------	------	500	------	------	------	------	------
900	200	100	100	------	------	------	300	------	------	100	------	------
3,500	2,500	400	100	------	------	------	100	------	100	------	100	100
300	200	------	------	------	------	------	100	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	100	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
2,900	1,300	300	300	------	------	------	100	100	100	400	100	200
1,600	600	100	300	------	------	------	300	100	100	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
13,300	7,000	1,300	1,000	------	------	200	1,000	200	700	400	200	1,300
900	300	200	100	------	------	------	100	------	100	------	------	------
500	100	------	------	------	------	------	------	------	200	100	------	------
3,800	1,400	100	200	------	------	100	500	------	900	400	100	100
500	300	------	------	------	------	------	------	------	------	------	------	------
900	400	------	100	------	------	------	200	------	100	------	------	------
2,700	700	100	200	------	------	------	700	------	400	300	100	200

NATIONAL REGISTER OF SCIENTIF

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.
AREAS OF TECHNOLOGY, CONTINUED				
ELECTROMAGNETIC - - - -	44,800	34,500	1,200	1,600
CIRCUITS, NETWORKS - - - -	1,300	1,100	------	100
COMMUNICATION - - - - - - - -	4,200	3,300	100	100
DIELECTRICS - - - - - - - -	100	100	------	------
ELECTRICAL APPLICATIONS - -	4,300	3,400	200	100
ELECTRICAL ENGINEERING - -	16,200	12,000	500	1,000
ELECTROMAGNETIC RADIATION -	900	600	------	100
ELECTROMECHANICAL TECH. - -	1,500	1,300	------	------
ELECTRONIC APPLICATIONS - -	6,900	5,500	200	200
INFRA-RED, RADIOMETRY - - -	200	100	------	------
INSULATION, ELECTRICAL - -	200	200	------	------
MAGNETICS, MAGNETISM - - -	400	300	------	------
NAVIGATION - - - - - - - -	800	500	------	------
PHOTOELECTRICITY - - - - -	100	100	------	------
POWER, ELECTRICAL - - - - -	5,300	4,100	100	------
RADIO FREQ. COMPATIBILITY -	100	100	------	------
RECORDING - - - - - - - -	100	100	------	------
SUPERCONDUCTIVITY - - - - -	------	------	------	------
TELECOMMUNICATIONS - - - -	2,100	1,700	------	100
DYNAMICS AND MECHANICS -	42,200	27,700	1,600	4,500
AERODYNAMICS - - - - - - -	4,300	2,500	------	400
ASTRODYNAMICS - - - - - - -	700	400	------	100
ENERGY GEN. AND CONVERSION	1,500	1,100	100	100
EXPLOSIVE EFFECTS - - - - -	200	100	------	------
FLUID DYNAMICS, MECHANICS -	2,500	1,300	------	700
FLUIDICS - - - - - - - - -	200	100	------	------
FRICTION - - - - - - - - -	100	------	------	------
GAS DYNAMICS - - - - - - -	500	300	------	100
HIGH PRESSURE - - - - - - -	100	100	------	------
HYDRAULICS - - - - - - - -	2,200	1,000	100	100
HYDRODYNAMICS - - - - - - -	300	100	------	------
KINETICS - - - - - - - - -	300	100	------	100
LUBRICATION - - - - - - - -	300	300	------	------
MAGNETOHYDRODYNAMICS - - -	100	------	------	------
MASS TRANSFER - - - - - - -	400	300	------	100
MECHANICAL APPLICATIONS - -	3,700	2,600	200	300
MECHANICAL ENGINEERING - -	19,200	13,700	1,000	1,600
MECHANICS - - - - - - - - -	1,400	400	------	700
POWER, MECHANICAL - - - - -	1,400	1,100	------	------
PROPULSION - - - - - - - -	2,700	1,900	------	100
VACUUM TECHNOLOGY - - - - -	200	100	------	------

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ER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER--CONTINUED

		TYPES OF EMPLOYER											
	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
TINUED													
- -	44,800	34,500	1,200	1,600	100	------	500	3,000	300	200	500	900	2,000
- -	1,300	1,100	------	100	------	------	------	------	------	------	------	------	100
- -	4,200	3,300	100	100	------	------	100	300	------	------	------	100	200
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	4,300	3,400	200	100	------	------	------	100	------	------	------	100	300
- -	16,200	12,000	500	1,000	------	------	100	1,100	------	------	300	400	800
N -	900	600	------	100	------	------	------	100	------	------	------	------	------
- -	1,500	1,300	------	------	------	------	------	100	------	------	------	------	------
- -	6,900	5,500	200	200	------	------	100	600	100	------	------	100	100
- -	200	100	------	------	------	------	------	------	------	------	------	------	------
- -	200	200	------	------	------	------	------	------	------	------	------	------	------
- -	400	300	------	------	------	------	------	------	------	------	------	------	------
- -	800	500	------	------	------	------	------	100	100	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	5,300	4,100	100	------	------	------	100	200	------	100	200	200	300
Y -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------	------	------
- -	2,100	1,700	------	100	------	------	------	100	------	------	------	100	100
CS -	42,200	27,700	1,600	4,500	100	------	800	3,900	600	200	300	500	2,000
- -	4,300	2,500	------	400	------	------	100	800	200	------	------	------	200
- -	700	400	------	100	------	------	------	100	------	------	------	------	------
ION	1,500	1,100	100	100	------	------	------	100	------	------	------	------	------
- -	200	100	------	------	------	------	------	100	------	------	------	------	------
CS -	2,500	1,300	------	700	------	------	100	200	------	------	------	------	100
- -	200	100	------	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------	------	------
- -	500	300	------	100	------	------	------	100	------	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	2,200	1,000	100	100	------	------	------	600	------	100	200	------	100
- -	300	100	------	------	------	------	------	------	------	------	------	------	------
- -	300	100	------	100	------	------	------	------	------	------	------	------	------
- -	300	300	------	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------	------	------
- -	400	300	------	100	------	------	------	------	------	------	------	------	------
- -	3,700	2,600	200	300	------	------	100	200	------	------	------	------	400
- -	19,200	13,700	1,000	1,600	------	------	100	1,100	100	100	100	300	1,000
- -	1,400	400	------	700	------	------	100	100	------	------	------	------	100
- -	1,400	1,100	------	------	------	------	------	------	------	------	------	------	100
- -	2,700	1,900	------	100	------	------	100	400	100	------	------	------	100
- -	200	100	------	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES O

TYPES OF EMPLO

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDER GOV CIVIL EMPLO
AREAS OF TECHNOLOGY, CONTINUED								
HEAT,LIGHT,APPL. PHYSICS	8,800	6,000	300	1,200	------	------	200	7[illegible]
ACOUSTICS, SONICS - - - - -	600	400	------	------	------	------	------	1[illegible]
APPLIED PHYSICS - - - - - -	600	400	------	100	------	------	------	1[illegible]
ASTRONOMY AND ASTROPHYSICS	100	------	------	------	------	------	------	----
CRYOGENICS - - - - - - - - -	500	400	------	------	------	------	------	----
HEAT TRANSFER - - - - - - - -	2,800	2,100	100	400	------	------	100	1[illegible]
HIGH TEMPERATURE - - - - - -	100	100	------	------	------	------	------	----
HOLOGRAPHY - - - - - - - - -	------	------	------	------	------	------	------	----
ILLUMINATION, LIGHTING - -	300	200	100	------	------	------	------	----
INSULATION, THERMAL - - - -	100	100	------	------	------	------	------	----
OPTICS - - - - - - - - - - -	300	300	------	------	------	------	------	----
PHOTOGRAPHY - - - - - - - - -	300	200	------	------	------	------	------	----
PHYSICS - - - - - - - - - - -	500	200	------	100	------	------	------	----
PLASMAS - - - - - - - - - - -	200	100	------	------	------	------	------	----
RADIO ASTRONOMY - - - - - - -	------	------	------	------	------	------	------	----
SOLID STATE - - - - - - - - -	500	400	------	100	------	------	------	----
THERMODYNAMICS - - - - - - -	1,300	800	------	300	------	------	------	----
THERMOPHYSICS - - - - - - - -	100	100	------	------	------	------	------	----
ULTRASONICS - - - - - - - - -	100	------	------	------	------	------	------	----
UNDERWATER ACOUSTICS - - -	200	100	------	------	------	------	------	1[illegible]
NUCLEAR - - - - - - - - -	2,600	1,700	------	200	------	------	100	3[illegible]
NUCLEAR ENGINEERING - - - -	1,500	900	------	200	------	------	100	2[illegible]
NUCLEONICS - - - - - - - - -	200	100	------	------	------	------	------	----
POWER, NUCLEAR - - - - - - -	800	700	------	------	------	------	------	1[illegible]
RADIATION SAFETY - - - - - -	100	------	------	------	------	------	------	----
RADIOACTIVITY - - - - - - -	------	------	------	------	------	------	------	----
ENGR.PROCESS,APPLICATION	33,600	21,800	1,700	1,300	------	------	300	2,9[illegible]
ASSEMBLY METHODS - - - - -	300	300	------	------	------	------	------	----
CONTAINERIZING, PACKAGING -	200	200	------	------	------	------	------	----
DRILLING - - - - - - - - - -	1,400	1,200	100	------	------	------	------	----
DRYING - - - - - - - - - - -	200	100	------	------	------	------	------	----
ENGINEERING - - - - - - - - -	22,800	13,700	1,300	1,100	------	------	200	2,3[illegible]
FASTENING, JOINING - - - -	200	100	------	------	------	------	------	----
FORMING, SHAPING - - - - -	300	200	------	------	------	------	------	----
MATERIAL HANDLING - - - - -	1,100	900	100	------	------	------	------	1[illegible]
MILITARY APPLICATIONS - - -	2,100	600	------	------	------	------	100	4[illegible]
MINIATURIZATION - - - - - -	------	------	------	------	------	------	------	----
PRESERVING - - - - - - - -	------	------	------	------	------	------	------	----
PROCESSES - - - - - - - - -	3,500	3,200	------	100	------	------	------	----
REFINING - - - - - - - - - -	1,400	1,200	------	------	------	------	------	----
SIZE REDUCTION - - - - - -	100	100	------	------	------	------	------	----

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INEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

TAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
800	6,000	300	1,200	------	------	200	700	100	------	------	100	200
600	400	------	------	------	------	------	100	------	------	------	------	------
600	400	------	100	------	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
500	400	------	------	------	------	------	------	------	------	------	------	------
800	2,100	100	400	------	------	100	100	------	------	------	------	100
100	100	------	------	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------	------	------	------
300	200	100	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
500	200	------	100	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------	------	------	------
500	400	------	100	------	------	------	------	------	------	------	------	------
300	800	------	300	------	------	------	------	------	------	------	------	100
100	100	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	100	------	------	------	------	------
600	1,700	------	200	------	------	100	300	100	------	------	100	------
500	900	------	200	------	------	100	200	100	------	------	100	------
200	100	------	------	------	------	------	------	------	------	------	------	------
800	700	------	------	------	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------	------	------	------
600	21,800	1,700	1,300	------	------	300	2,900	1,300	1,200	1,100	500	1,500
300	300	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
400	1,200	100	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
800	13,700	1,300	1,100	------	------	200	2,300	400	1,200	1,100	400	1,100
200	100	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
100	900	100	------	------	------	------	100	------	------	------	------	------
100	600	------	------	------	------	100	400	800	------	------	100	100
---	------	------	------	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------	------	------	------
500	3,200	------	100	------	------	------	------	------	------	------	------	100
400	1,200	------	------	------	------	------	------	------	------	------	------	100
100	100	------	------	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHN

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOL

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL
AREAS OF TECHNOLOGY, CONTINUED						
AUTOMATION AND CONTROL -	12,800	10,000	300	600	------	------
ADAPTIVE SYSTEMS - - - - -	100	100	------	------	------	------
AUTOMATION, CYBERNETICS - -	500	500	------	------	------	------
CONTROL (GENERAL) - - - - -	4,300	3,300	100	300	------	------
GUIDANCE, STABILITY - - - -	1,000	800	------	100	------	------
INSTRUMENTATION - - - - - -	5,700	4,600	200	100	------	------
MEASUREMENT, METROLOGY - -	500	400	------	------	------	------
SERVO-MECHANISMS - - - - -	200	200	------	------	------	------
TELEMETRY - - - - - - - - -	300	200	------	------	------	------
WORK MGMT, EVALUATION -	58,100	46,300	900	1,600	------	------
ARRANGEMENT - - - - - - - -	100	100	------	------	------	------
CONFIGURATION CONTROL - - -	300	200	------	------	------	------
COST ENGINEERING - - - - -	2,500	1,900	100	------	------	------
EQUIPMENT FACILITIES - - -	500	400	------	------	------	------
FIRE PREVENTION - - - - - -	800	500	------	------	------	------
INDUSTRIAL ENGINEERING - -	8,300	6,500	200	500	------	------
MAINTAINABILITY,MAINTENANCE	2,300	1,600	------	------	------	------
MANUFACTURING TECHNOLOGY -	4,600	4,200	100	100	------	------
MOTION AND TIME STUDY - - -	------	------	------	------	------	------
NONDESTRUCTIVE TESTS - - -	200	100	------	------	------	------
OPERATING PROCEDURES - - -	1,100	800	------	------	------	------
OPERATIONS RESEARCH - - - -	2,700	1,600	------	300	------	------
PLANT AND FACILITIES ENGR.	7,000	5,800	100	200	------	------
PRODUCT ENGINEERING - - - -	5,000	4,700	100	------	------	------
PRODUCTION METHODS - - - -	1,700	1,500	100	------	------	------
PRODUCTION PLANNING,CONTROL	3,400	3,000	100	------	------	------
QUALITY ASSURANCE - - - - -	1,200	900	------	------	------	------
QUALITY CONTROL - - - - - -	1,100	900	------	------	------	------
RADIOGRAPHY, X-RAYS - - - -	------	------	------	------	------	------
RELIABILITY - - - - - - - -	900	700	------	------	------	------
SAFETY ENGINEERING - - - -	600	300	------	------	------	------
SPECIFICATIONS, STANDARDS -	900	500	------	------	------	------
SYSTEMS ENGINEERING - - - -	8,400	6,500	100	200	------	------
TESTING-ENVIRONMENTAL - - -	1,900	1,400	------	------	------	------
TESTING-LABORATORY - - - -	1,500	1,200	------	100	------	------
TOOLING, TOOLS - - - - - -	200	200	------	------	------	------
VALUE ENGINEERING - - - - -	400	300	------	------	------	------
WORK METHODS,SIMPLIFICATION	300	200	------	------	------	------

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R OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER--CONTINUED

	TOTAL	TYPES OF EMPLOYER: PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
INUED													
-	12,800	10,000	300	600	------	------	200	900	100	------	------	200	400
-	100	100	------	------	------	------	------	------	------	------	------	------	------
-	500	500	------	------	------	------	------	------	------	------	------	------	------
-	4,300	3,300	100	300	------	------	------	200	------	------	------	100	100
-	1,000	800	------	100	------	------	------	100	------	------	------	------	------
-	5,700	4,600	200	100	------	------	100	300	------	------	------	100	200
-	500	400	------	------	------	------	------	100	------	------	------	------	------
-	200	200	------	------	------	------	------	------	------	------	------	------	------
-	300	200	------	------	------	------	------	100	------	------	------	------	------
-	58,100	46,300	900	1,600	------	------	1,200	4,100	1,000	500	400	600	1,400
-	100	100	------	------	------	------	------	------	------	------	------	------	------
-	300	200	------	------	------	------	------	100	------	------	------	------	------
-	2,500	1,900	100	------	------	------	------	200	------	------	------	100	100
-	500	400	------	------	------	------	------	------	------	------	------	------	------
-	800	500	------	------	------	------	100	100	------	------	------	------	------
-	8,300	6,500	200	500	------	------	100	600	100	------	------	100	200
CE	2,300	1,600	------	------	------	------	------	200	200	100	------	100	100
-	4,600	4,200	100	100	------	------	------	100	------	------	------	------	100
-	------	------	------	------	------	------	------	------	------	------	------	------	------
-	200	100	------	------	------	------	------	------	------	------	------	------	------
-	1,100	800	------	------	------	------	------	------	100	------	------	------	------
-	2,700	1,600	------	300	------	------	200	300	100	------	------	------	------
.	7,000	5,800	100	200	------	------	100	400	100	------	100	100	100
-	5,000	4,700	100	------	------	------	------	100	------	------	------	------	100
-	1,700	1,500	100	------	------	------	------	------	------	------	------	------	100
OL	3,400	3,000	100	------	------	------	------	------	------	------	------	100	100
-	1,200	900	------	------	------	------	------	100	------	------	------	------	------
-	1,100	900	------	------	------	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------	------	------	------	------	------
-	900	700	------	------	------	------	------	200	------	------	------	------	------
-	600	300	------	------	------	------	------	100	------	100	------	------	100
-	900	500	------	------	------	------	100	200	------	100	------	------	------
-	8,400	6,500	100	200	------	------	400	800	100	------	------	------	100
-	1,900	1,400	------	------	------	------	100	300	100	------	------	100	------
-	1,500	1,200	------	100	------	------	100	200	------	------	------	------	------
-	200	200	------	------	------	------	------	------	------	------	------	------	------
-	400	300	------	------	------	------	------	100	------	------	------	------	------
ON	300	200	------	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND

TYPES OF

AREAS OF TECHNOLOGY	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL
AREAS OF TECHNOLOGY, CONTINUED							
INFORMATION, MATHEMATICS	11,700	8,800	200	1,100	100	------	200
COMPUTER APPLICATIONS - - -	5,900	4,700	100	400	------	------	100
DATA PROCESSING - - - - - -	1,100	1,000	------	------	------	------	------
DISPLAY - - - - - - - - - -	400	400	------	------	------	------	------
DRAFTING, DRAWING, GRAPHICS	900	400	------	200	------	------	------
INFORMATION RETRIEVAL - - -	200	200	------	------	------	------	------
INFORMATION THEORY - - - -	100	100	------	------	------	------	------
LOGIC - - - - - - - - - - -	300	300	------	------	------	------	------
MATHEMATICS - - - - - - - -	400	200	------	100	100	------	------
NEURAL NETS - - - - - - - -	------	------	------	------	------	------	------
REPROGRAPHY - - - - - - - -	------	------	------	------	------	------	------
STATISTICS - - - - - - - -	200	100	------	------	------	------	------
STRESS ANALYSIS - - - - - -	1,900	1,400	------	300	------	------	------
OTHER - - - - - - - - - -	10,100	6,500	500	600	------	------	300
NO REPORT - - - - - - - -	5,300	2,900	400	300	------	------	100

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

ED

TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
11,700	8,800	200	1,100	100	------	200	600	100	200	100	100	200
5,900	4,700	100	400	------	------	100	300	100	100	------	------	100
1,100	1,000	------	------	------	------	------	------	------	------	------	------	------
400	400	------	------	------	------	------	------	------	------	------	------	------
900	400	------	200	------	------	------	------	------	------	------	------	100
200	200	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
400	200	------	100	100	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
1,900	1,400	------	300	------	------	------	100	------	100	------	------	100
10,100	6,500	500	600	------	------	300	900	300	200	200	300	400
5,300	2,900	400	300	------	------	100	200	100	100	100	100	1,000

TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOG

AREAS OF TECHNOLOGY	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMI
ALL AREAS OF TECHNOLOGY	308,000	4,000	33,000	2,10
BIOMEDICAL	1,700	200	200	------
AQUACULTURE	------	------	------	------
BIOCHEMISTRY	100	------	------	------
BIOENGINEERING	700	100	100	------
BIOLOGICAL APPLICATIONS	100	------	------	------
BIOMECHANICS	100	------	------	------
BIONICS, MEDICAL ELECTRONICS	100	------	------	------
HEALTH PHYSICS	------	------	------	------
INDUSTRIAL HEALTH	100	------	------	------
LIFE SUPPORT	100	------	100	------
MEDICAL APPLICATIONS	200	------	------	------
PHYSIOLOGY	------	------	------	------
PUBLIC HEALTH	200	------	------	------
BEHAVIORAL AND SOCIAL	4,300	100	100	------
ECONOMICS	1,900	------	------	------
EDUCATIONAL TECHNOLOGY	2,000	------	------	------
HISTORY (TECHNOLOGICAL)	100	------	------	------
HUMAN FACTORS	300	------	------	------
PSYCHOLOGY	------	------	------	------
CHEMICAL AND MATERIALS	12,400	100	1,100	40
CHEMICAL APPLICATIONS	4,800	100	------	------
COMBUSTION, FUELS	1,000	------	200	------
COATING, PLATING, CLADDING	400	------	------	------
CORROSION	400	------	------	------
CRYSTALS, CRYSTALLOGRAPHY	100	------	------	------
ELECTROCHEMISTRY	300	------	------	------
FILAMENT TECHNOLOGY	200	------	------	------
FUEL CELLS	100	------	------	------
MATERIAL APPLICATIONS	3,600	------	500	10
MATERIAL PROPERTIES	1,400	------	200	10
THERMOCHEMISTRY	100	------	------	------
METALLURGICAL	12,900	------	600	10
BENEFICIATION, ORE PROCESS.	600	------	------	------
CASTING	400	------	------	------
METALLURGY (GENERAL)	4,300	------	300	------
METALLURGY, EXTRACTIVE	1,200	------	------	------
METALLURGY, PHYSICAL	3,000	------	200	------
METALLURGY, POWDER	400	------	------	------
METALLURGY, PROCESS	2,300	------	100	------
WELDING	600	------	------	------

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ER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES

OGY	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
- - - - - - - - -	308,000	4,000	33,000	2,100	19,500	7,700	11,000	45,900	14,600
- - - - - - - - -	1,700	200	200	------	100	------	------	100	100
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	700	100	100	------	100	------	------	------	100
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	100	------	100	------	------	------	------	------	------
- - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	200	------	------	------	------	------	------	100	------
- - - - - - - - -	4,300	100	100	------	400	100	------	200	1,600
- - - - - - - - -	1,900	------	------	------	400	------	------	100	100
- - - - - - - - -	2,000	------	------	------	------	------	------	100	1,500
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - -	12,400	100	1,100	400	4,000	100	100	500	500
- - - - - - - - -	4,800	100	------	------	3,100	------	------	100	200
- - - - - - - - -	1,000	------	200	------	100	------	------	------	------
- - - - - - - - -	400	------	------	------	100	------	------	------	------
- - - - - - - - -	400	------	------	------	100	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	300	------	------	------	100	------	------	------	------
- - - - - - - - -	200	------	------	------	100	------	------	------	------
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	3,600	------	500	100	300	------	------	200	100
- - - - - - - - -	1,400	------	200	100	200	------	------	100	200
- - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - -	12,900	------	600	100	200	------	100	100	500
- - - - - - - - -	600	------	------	------	------	------	------	------	------
- - - - - - - - -	400	------	------	------	------	------	------	------	------
- - - - - - - - -	4,300	------	300	------	100	------	------	------	200
- - - - - - - - -	1,200	------	------	------	------	------	------	------	------
- - - - - - - - -	3,000	------	200	------	------	------	------	------	200
- - - - - - - - -	400	------	------	------	------	------	------	------	------
- - - - - - - - -	2,300	------	100	------	------	------	------	------	------
- - - - - - - - -	600	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCT

PRODUCTS OR

AREAS OF TECHNOLOGY	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MAR TRA POR
ALL AREAS OF TECHNOLOGY - - - - - - - -	19,200	23,000	2,800	28,400	4,
BIOMEDICAL - - - - - - - - - - - - - - - -	------	100	100	100	--
AQUACULTURE - - - - - - - - - - - - - - -	------	------	------	------	--
BIOCHEMISTRY - - - - - - - - - - - - - -	------	------	------	------	--
BIOENGINEERING - - - - - - - - - - - - -	------	------	------	------	--
BIOLOGICAL APPLICATIONS - - - - - - - - -	------	------	------	------	--
BIOMECHANICS - - - - - - - - - - - - - -	------	------	------	------	--
BIONICS, MEDICAL ELECTRONICS - - - - - -	------	------	------	------	--
HEALTH PHYSICS - - - - - - - - - - - - -	------	------	------	------	--
INDUSTRIAL HEALTH - - - - - - - - - - - -	------	------	------	------	--
LIFE SUPPORT - - - - - - - - - - - - - -	------	------	------	------	--
MEDICAL APPLICATIONS - - - - - - - - - -	------	------	------	------	--
PHYSIOLOGY - - - - - - - - - - - - - - -	------	------	------	------	--
PUBLIC HEALTH - - - - - - - - - - - - - -	------	------	------	------	--
BEHAVIORAL AND SOCIAL - - - - - - - - -	------	100	------	100	--
ECONOMICS - - - - - - - - - - - - - - - -	------	------	------	------	--
EDUCATIONAL TECHNOLOGY - - - - - - - - -	------	------	------	100	--
HISTORY (TECHNOLOGICAL) - - - - - - - - -	------	------	------	------	--
HUMAN FACTORS - - - - - - - - - - - - - -	------	------	------	------	--
PSYCHOLOGY - - - - - - - - - - - - - - -	------	------	------	------	--
CHEMICAL AND MATERIALS - - - - - - - - -	400	200	100	1,100	--
CHEMICAL APPLICATIONS - - - - - - - - - -	------	------	------	200	--
COMBUSTION, FUELS - - - - - - - - - - - -	------	------	------	200	--
COATING, PLATING, CLADDING - - - - - - -	------	------	------	------	--
CORROSION - - - - - - - - - - - - - - - -	------	------	------	------	--
CRYSTALS, CRYSTALLOGRAPHY - - - - - - - -	------	------	------	------	--
ELECTROCHEMISTRY - - - - - - - - - - - -	100	------	------	------	--
FILAMENT TECHNOLOGY - - - - - - - - - - -	------	------	------	------	--
FUEL CELLS - - - - - - - - - - - - - - -	------	------	------	------	--
MATERIAL APPLICATIONS - - - - - - - - - -	200	100	------	600	--
MATERIAL PROPERTIES - - - - - - - - - - -	100	------	------	------	--
THERMOCHEMISTRY - - - - - - - - - - - - -	------	------	------	------	--
METALLURGICAL - - - - - - - - - - - - -	300	100	------	500	--
BENEFICIATION, ORE PROCESS. - - - - - - -	------	------	------	------	--
CASTING - - - - - - - - - - - - - - - - -	------	------	------	------	--
METALLURGY (GENERAL) - - - - - - - - - -	100	------	------	200	--
METALLURGY, EXTRACTIVE - - - - - - - - -	------	------	------	------	--
METALLURGY, PHYSICAL - - - - - - - - - -	------	------	------	100	--
METALLURGY, POWDER - - - - - - - - - - -	------	------	------	------	--
METALLURGY, PROCESS - - - - - - - - - - -	------	------	------	100	--
WELDING - - - - - - - - - - - - - - - - -	100	------	------	------	--

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RS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS- PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - -	19,200	23,000	2,800	28,400	4,800	1,300	12,600	6,300	5,900
- - - -	------	100	100	100	------	400	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	200	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	100	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	100	------	100	------	------	100	------	100
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	400	200	100	1,100	------	------	1,100	500	100
- - - -	------	------	------	200	------	------	------	------	------
- - - -	------	------	------	200	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	100	------
- - - -	------	------	------	------	------	------	100	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	200	100	------	600	------	------	500	200	------
- - - -	100	------	------	------	------	------	300	100	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	300	100	------	500	100	------	7,300	900	800
- - - -	------	------	------	------	------	------	100	------	300
- - - -	------	------	------	------	------	------	300	------	------
- - - -	100	------	------	200	------	------	2,300	300	100
- - - -	------	------	------	------	------	------	700	------	300
- - - -	------	------	------	100	------	------	1,900	200	------
- - - -	------	------	------	------	------	------	300	------	------
- - - -	------	------	------	100	------	------	1,600	100	100
- - - -	100	------	------	------	------	----	100	200	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNI

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY

PRODUCTS

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM
ALL AREAS OF TECHNOLOGY	2,500	5,200	15,500
BIOMEDICAL	------	------	------
AQUACULTURE	------	------	------
BIOCHEMISTRY	------	------	------
BIOENGINEERING	------	------	------
BIOLOGICAL APPLICATIONS	------	------	------
BIOMECHANICS	------	------	------
BIONICS,MEDICAL ELECTRONICS	------	------	------
HEALTH PHYSICS	------	------	------
INDUSTRIAL HEALTH	------	------	------
LIFE SUPPORT	------	------	------
MEDICAL APPLICATIONS	------	------	------
PHYSIOLOGY	------	------	------
PUBLIC HEALTH	------	------	------
BEHAVIORAL AND SOCIAL	------	------	700
ECONOMICS	------	------	700
EDUCATIONAL TECHNOLOGY	------	------	------
HISTORY (TECHNOLOGICAL)	------	------	------
HUMAN FACTORS	------	------	------
PSYCHOLOGY	------	------	------
CHEMICAL AND MATERIALS	100	100	500
CHEMICAL APPLICATIONS	------	------	200
COMBUSTION, FUELS	------	------	100
COATING, PLATING, CLADDING	------	------	------
CORROSION	------	------	100
CRYSTALS, CRYSTALLOGRAPHY	------	------	------
ELECTROCHEMISTRY	------	------	------
FILAMENT TECHNOLOGY	------	------	------
FUEL CELLS	------	------	------
MATERIAL APPLICATIONS	100	------	100
MATERIAL PROPERTIES	------	------	------
THERMOCHEMISTRY	------	------	------
METALLURGICAL	200	100	100
BENEFICIATION, ORE PROCESS.	------	------	------
CASTING	------	------	------
METALLURGY (GENERAL)	100	------	------
METALLURGY, EXTRACTIVE	------	------	------
METALLURGY, PHYSICAL	------	------	------
METALLURGY, POWDER	------	------	------
METALLURGY, PROCESS	------	------	------
WELDING	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

OF TECHNOLOGY	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
CHNOLOGY - - - - - - - - -	2,500	5,200	15,500	1,500	14,700	11,300	15,200
- - - - - - - - - - - - - -	------	------	------	------	------	100	200
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	100
TIONS - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
ECTRONICS - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
NS - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
SOCIAL - - - - - - - - - -	------	------	700	------	200	300	200
- - - - - - - - - - - - - -	------	------	700	------	200	200	------
LOGY - - - - - - - - - - - -	------	------	------	------	------	------	100
ICAL) - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
TERIALS - - - - - - - - - -	100	100	500	------	300	500	700
ONS - - - - - - - - - - - -	------	------	200	------	------	200	400
- - - - - - - - - - - - - -	------	------	100	------	200	------	100
CLADDING - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	100	------	------	------	------
OGRAPHY - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
Y - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
ONS - - - - - - - - - - - -	100	------	100	------	100	100	200
S - - - - - - - - - - - - -	------	------	------	------	------	100	100
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	200	100	100	------	------	200	800
PROCESS. - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
L) - - - - - - - - - - - - -	100	------	------	------	------	100	400
TIVE - - - - - - - - - - - -	------	------	------	------	------	------	100
AL - - - - - - - - - - - - -	------	------	------	------	------	------	200
- - - - - - - - - - - - - -	------	------	------	------	------	------	------
S - - - - - - - - - - - - -	------	------	------	------	------	------	100
- - - - - - - - - - - - - -	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL,

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS O

AREAS OF TECHNOLOGY	TOTAL	PRODUCTS O			
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICAL & ALLIED PRODUCTS
AREAS OF TECHNOLOGY, CONTINUED					
EARTH,ATMOSPHERE,MARINE - - - - - - - - -	10,800	100	200	100	100
ATMOSPHERIC SCIENCES - - - - - - - - - - -	200	------	100	------	------
DESALTING - - - - - - - - - - - - - - - -	200	------	------	------	------
EARTH SCIENCES - - - - - - - - - - - - - -	900	------	------	------	------
GEOCHEMISTRY - - - - - - - - - - - - - - -	100	------	------	------	------
GEODESY - - - - - - - - - - - - - - - - -	100	------	------	------	------
GEOLOGY - - - - - - - - - - - - - - - - -	2,700	------	------	------	------
GEOPHYSICS - - - - - - - - - - - - - - - -	400	------	------	------	------
HYDROGRAPHY - - - - - - - - - - - - - - -	------	------	------	------	------
HYDROLOGY - - - - - - - - - - - - - - - -	1,000	100	------	------	------
MARINE SCIENCES - - - - - - - - - - - - -	900	------	------	------	------
MINING, SURFACE - - - - - - - - - - - - -	1,300	------	------	------	------
MINING, UNDERGROUND - - - - - - - - - - -	1,900	------	------	------	------
MINING, UNDERWATER - - - - - - - - - - - -	100	------	------	------	------
OCEANOGRAPHY - - - - - - - - - - - - - - -	300	------	------	------	------
OFFSHORE OPERATIONS - - - - - - - - - - -	600	------	------	------	------
UNDERWATER TECHNOLOGY - - - - - - - - - -	200	------	------	------	------
ENVIRONMENTAL,STRUCTURAL - - - - - - - - -	35,900	800	2,100	300	400
AIR POLLUTION - - - - - - - - - - - - - -	900	------	------	------	100
CONCRETE TECHNOLOGY - - - - - - - - - - -	1,400	------	------	200	------
CONSERVATION, RECLAMATION - - - - - - - -	700	200	------	------	------
DRAINAGE, IRRIGATION - - - - - - - - - - -	900	300	------	------	------
ENVIRONMENTAL CONTROL - - - - - - - - - -	3,500	100	200	------	------
ENVIRONMENTAL FACTORS - - - - - - - - - -	300	------	100	------	------
NOISE REDUCTION - - - - - - - - - - - - -	200	------	------	------	------
PHOTOGRAMMETRY - - - - - - - - - - - - - -	100	------	------	------	------
POLLUTION - - - - - - - - - - - - - - - -	300	------	------	------	100
PUBLIC SAFETY - - - - - - - - - - - - - -	200	------	------	------	------
ROCK MECHANICS - - - - - - - - - - - - - -	200	------	------	------	------
SANITARY ENGINEERING - - - - - - - - - - -	2,900	------	------	------	------
SOILS - - - - - - - - - - - - - - - - - -	1,600	------	------	------	------
SOLID WASTE - - - - - - - - - - - - - - -	100	------	------	------	------
STRUCTURES - - - - - - - - - - - - - - - -	13,300	100	1,500	------	------
SURVEYING, MAPPING - - - - - - - - - - - -	900	------	------	------	------
TRAFFIC - - - - - - - - - - - - - - - - -	500	------	------	------	------
TRANSPORTATION - - - - - - - - - - - - - -	3,800	------	200	------	------
WASTE DISPOSAL - - - - - - - - - - - - - -	500	------	------	------	------
WATER POLLUTION - - - - - - - - - - - - -	900	------	------	------	------
WATER RESOURCES AND SUPPLY - - - - - - - -	2,700	100	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

RS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU- NICATIONS	COMPUTERS	CONSTRUC- TION & CIVIL ENGR	EDUCA- TIONAL, INFOR- MATION SERVICES
- - - -	10,800	100	200	100	100	------	100	1,500	500
- - - -	200	------	100	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	------	------
- - - -	900	------	------	------	------	------	------	300	100
- - - -	100	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------
- - - -	2,700	------	------	------	------	------	------	100	200
- - - -	400	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	1,000	100	------	------	------	------	------	700	100
- - - -	900	------	------	------	------	------	------	------	------
- - - -	1,300	------	------	------	------	------	------	------	------
- - - -	1,900	------	------	------	------	------	------	100	------
- - - -	100	------	------	------	------	------	------	------	------
- - - -	300	------	------	------	------	------	------	------	------
- - - -	600	------	------	------	------	------	------	100	------
- - - -	200	------	------	------	------	------	------	------	------
- - - -	35,900	800	2,100	300	400	------	100	20,400	1,600
- - - -	900	------	------	------	100	------	------	100	------
- - - -	1,400	------	------	200	------	------	------	1,000	100
- - - -	700	200	------	------	------	------	------	400	------
- - - -	900	300	------	------	------	------	------	500	100
- - - -	3,500	100	200	------	------	------	------	500	100
- - - -	300	------	100	------	------	------	------	100	------
- - - -	200	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	100	------
- - - -	300	------	------	------	100	------	------	------	------
- - - -	200	------	------	------	------	------	------	100	------
- - - -	200	------	------	------	------	------	------	100	------
- - - -	2,900	------	------	------	------	------	------	2,000	200
- - - -	1,600	------	------	------	------	------	------	1,200	200
- - - -	100	------	------	------	------	------	------	------	------
- - - -	13,300	100	1,500	------	------	------	------	8,400	600
- - - -	900	------	------	------	------	------	------	700	100
- - - -	500	------	------	------	------	------	------	400	------
- - - -	3,800	------	200	------	------	------	------	2,300	100
- - - -	500	------	------	------	------	------	------	200	------
- - - -	900	------	------	------	------	------	------	500	------
- - - -	2,700	100	------	------	------	------	------	1,800	100

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS

PRODUCTS OR

AREAS OF TECHNOLOGY	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MAR TRA PORT
AREAS OF TECHNOLOGY, CONTINUED					
EARTH, ATMOSPHERE, MARINE	------	200	100	200	
ATMOSPHERIC SCIENCES	------	------	------	------	---
DESALTING	------	------	------	------	---
EARTH SCIENCES	------	------	------	------	---
GEOCHEMISTRY	------	------	------	------	---
GEODESY	------	------	------	------	---
GEOLOGY	------	------	------	------	---
GEOPHYSICS	------	100	------	------	---
HYDROGRAPHY	------	------	------	------	---
HYDROLOGY	------	------	------	------	---
MARINE SCIENCES	------	------	------	------	
MINING, SURFACE	------	------	------	------	---
MINING, UNDERGROUND	------	------	------	------	---
MINING, UNDERWATER	------	------	------	------	---
OCEANOGRAPHY	------	------	------	------	
OFFSHORE OPERATIONS	------	------	------	------	
UNDERWATER TECHNOLOGY	------	100	------	------	
ENVIRONMENTAL, STRUCTURAL	200	100	100	2,700	
AIR POLLUTION	------	------	------	200	---
CONCRETE TECHNOLOGY	------	------	------	------	---
CONSERVATION, RECLAMATION	------	------	------	------	---
DRAINAGE, IRRIGATION	------	------	------	------	---
ENVIRONMENTAL CONTROL	100	------	------	2,000	---
ENVIRONMENTAL FACTORS	------	------	------	------	---
NOISE REDUCTION	------	------	------	------	---
PHOTOGRAMMETRY	------	------	------	------	---
POLLUTION	------	------	------	------	---
PUBLIC SAFETY	------	------	------	------	---
ROCK MECHANICS	------	------	------	------	---
SANITARY ENGINEERING	------	------	------	100	--
SOILS	------	------	------	------	--
SOLID WASTE	------	------	------	------	--
STRUCTURES	------	------	------	100	
SURVEYING, MAPPING	------	------	------	------	--
TRAFFIC	------	------	------	------	--
TRANSPORTATION	------	------	------	------	
WASTE DISPOSAL	------	------	------	------	--
WATER POLLUTION	------	------	------	------	--
WATER RESOURCES AND SUPPLY	------	------	------	100	--

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - - -	------	200	100	200	900	------	100	------	3,600
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	100
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	1,100
- - - - - -	------	100	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	700	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	1,000
- - - - - -	------	------	------	------	------	------	------	------	1,300
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	100	------	------	------	------
- - - - - -	------	------	------	------	100	------	------	------	------
- - - - - -	------	100	------	------	100	------	------	------	------
- - - - - -	200	100	100	2,700	600	100	100	400	200
- - - - - -	------	------	------	200	------	100	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	100	------	------	2,000	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	100
- - - - - -	------	------	------	100	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	100	300	------	------	300	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	200	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	------	------	------	------	------	------
- - - - - -	------	------	------	100	------	------	------	------	------

NATIONAL REGISTER OF SCIENTI

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE
AREAS OF TECHNOLOGY, CONTINUED		
EARTH,ATMOSPHERE,MARINE	------	100
ATMOSPHERIC SCIENCES	------	------
DESALTING	------	------
EARTH SCIENCES	------	------
GEOCHEMISTRY	------	------
GEODESY	------	------
GEOLOGY	------	------
GEOPHYSICS	------	------
HYDROGRAPHY	------	------
HYDROLOGY	------	------
MARINE SCIENCES	------	------
MINING, SURFACE	------	------
MINING, UNDERGROUND	------	------
MINING, UNDERWATER	------	------
OCEANOGRAPHY	------	------
OFFSHORE OPERATIONS	------	------
UNDERWATER TECHNOLOGY	------	100
ENVIRONMENTAL,STRUCTURAL	300	100
AIR POLLUTION	------	------
CONCRETE TECHNOLOGY	------	------
CONSERVATION, RECLAMATION	------	------
DRAINAGE, IRRIGATION	------	------
ENVIRONMENTAL CONTROL	------	------
ENVIRONMENTAL FACTORS	------	------
NOISE REDUCTION	------	------
PHOTOGRAMMETRY	------	------
POLLUTION	------	------
PUBLIC SAFETY	------	------
ROCK MECHANICS	------	------
SANITARY ENGINEERING	------	------
SOILS	------	------
SOLID WASTE	------	------
STRUCTURES	------	------
SURVEYING, MAPPING	------	------
TRAFFIC	100	------
TRANSPORTATION	200	------
WASTE DISPOSAL	------	------
WATER POLLUTION	------	------
WATER RESOURCES AND SUPPLY	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

BER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

TECHNOLOGY	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
CONTINUED							
ARINE - - - - - - - - -	------	100	1,800	------	100	200	900
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - -	------	------	400	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	700	------	------	------	300
- - - - - - - - - - - -	------	------	100	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	100	100
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	100
- - - - - - - - - - - -	------	------	100	------	------	------	200
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	300	------	------	------	------
- - - - - - - - - - - -	------	100	------	------	------	------	------
CTURAL - - - - - - - -	300	100	400	400	1,500	700	2,300
- - - - - - - - - - - -	------	------	------	------	100	100	------
- - - - - - - - - - - -	------	------	------	------	------	------	100
TION - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	100	100	100
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	------	------	400	------	100
- - - - - - - - - - - -	------	------	------	------	------	------	100
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	------	------	100	100	200	100	1,300
- - - - - - - - - - - -	------	------	------	------	------	------	------
- - - - - - - - - - - -	100	------	------	------	------	------	------
- - - - - - - - - - - -	200	------	100	400	------	------	200
- - - - - - - - - - - -	------	------	------	------	100	------	------
- - - - - - - - - - - -	------	------	------	------	100	100	------
UPPLY - - - - - - - - -	------	------	------	------	400	------	200

NATIONAL REGISTER OF SCIENTIFIC AND TECHNI

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY

AREAS OF TECHNOLOGY	TOTAL	AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CE
AREAS OF TECHNOLOGY, CONTINUED				
ELECTROMAGNETIC	44,800	100	2,300	
CIRCUITS, NETWORKS	1,300	------	100	-
COMMUNICATION	4,200	------	200	-
DIELECTRICS	100	------	------	-
ELECTRICAL APPLICATIONS	4,300	------	100	-
ELECTRICAL ENGINEERING	16,200	------	500	-
ELECTROMAGNETIC RADIATION	900	------	------	-
ELECTROMECHANICAL TECH.	1,500	------	100	-
ELECTRONIC APPLICATIONS	6,900	------	600	-
INFRA-RED, RADIOMETRY	200	------	------	-
INSULATION, ELECTRICAL	200	------	------	-
MAGNETICS, MAGNETISM	400	------	------	-
NAVIGATION	800	------	300	-
PHOTOELECTRICITY	100	------	------	-
POWER, ELECTRICAL	5,300	------	100	-
RADIO FREQ. COMPATIBILITY	100	------	------	-
RECORDING	100	------	------	-
SUPERCONDUCTIVITY	------	------	------	-
TELECOMMUNICATIONS	2,100	------	100	-
DYNAMICS AND MECHANICS	42,200	400	9,900	
AERODYNAMICS	4,300	------	3,600	-
ASTRODYNAMICS	700	------	600	-
ENERGY GEN. AND CONVERSION	1,500	------	100	-
EXPLOSIVE EFFECTS	200	------	------	-
FLUID DYNAMICS, MECHANICS	2,500	------	800	-
FLUIDICS	200	------	------	-
FRICTION	100	------	------	-
GAS DYNAMICS	500	------	300	-
HIGH PRESSURE	100	------	------	-
HYDRAULICS	2,200	------	100	-
HYDRODYNAMICS	300	------	------	-
KINETICS	300	------	------	-
LUBRICATION	300	------	100	-
MAGNETOHYDRODYNAMICS	100	------	------	-
MASS TRANSFER	400	------	------	-
MECHANICAL APPLICATIONS	3,700	100	300	-
MECHANICAL ENGINEERING	19,200	200	1,500	
MECHANICS	1,400	------	300	-
POWER, MECHANICAL	1,400	------	100	-
PROPULSION	2,700	------	2,000	-
VACUUM TECHNOLOGY	200	------	------	-

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

HNOLOGY	TOTAL	PRODUCTS OR SERVICES: AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
TINUED									
- - - - - - - - - - -	44,800	100	2,300	100	400	5,200	1,700	900	1,30C
- - - - - - - - - - -	1,300	------	100	------	------	100	300	------	10C
- - - - - - - - - - -	4,200	------	200	------	------	2,600	100	------	10C
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	4,300	------	100	------	100	------	------	200	10C
- - - - - - - - - - -	16,200	------	500	------	200	500	500	400	900
N - - - - - - - - - - -	900	------	------	------	------	100	------	------	10C
- - - - - - - - - - -	1,500	------	100	------	------	------	100	------	------
- - - - - - - - - - -	6,900	------	600	------	------	400	500	------	10C
- - - - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - - - -	400	------	------	------	------	------	100	------	------
- - - - - - - - - - -	800	------	300	------	------	------	------	------	------
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	5,300	------	100	------	------	------	100	200	------
Y - - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - -	2,100	------	100	------	------	1,500	100	------	------
S - - - - - - - - - - -	42,200	40C	9,900	200	1,400	100	300	3,000	3,20C
- - - - - - - - - - -	4,300	------	3,600	------	------	------	------	------	20C
- - - - - - - - - - -	700	------	600	------	------	------	------	------	------
GN - - - - - - - - - -	1,500	------	100	------	------	------	------	100	------
- - - - - - - - - - -	200	------	------	------	100	------	------	------	------
S - - - - - - - - - - -	2,500	------	800	------	100	------	------	------	50C
- - - - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	500	------	300	------	------	------	------	------	100
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	2,200	------	100	------	------	------	------	1,100	100
- - - - - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - - - - -	300	------	------	------	100	------	------	------	10C
- - - - - - - - - - -	300	------	100	------	------	------	------	------	------
- - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - -	400	------	------	------	200	------	------	------	10C
- - - - - - - - - - -	3,700	100	300	------	100	------	------	200	20C
- - - - - - - - - - -	19,200	20C	1,500	100	700	100	200	1,400	1,30C
- - - - - - - - - - -	1,400	------	300	------	------	------	------	100	600
- - - - - - - - - - -	1,400	------	100	------	------	------	------	100	------
- - - - - - - - - - -	2,700	------	2,000	------	100	------	------	------	100
- - - - - - - - - - -	200	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND

PRODU

AREAS OF TECHNOLOGY	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINER MECHANIC EQUIPME
AREAS OF TECHNOLOGY, CONTINUED				
ELECTROMAGNETIC	10,500	10,000	200	700
CIRCUITS, NETWORKS	100	600	------	------
COMMUNICATION	100	800	------	------
DIELECTRICS	------	------	------	------
ELECTRICAL APPLICATIONS	2,300	200	------	100
ELECTRICAL ENGINEERING	5,300	2,200	------	300
ELECTROMAGNETIC RADIATION	------	600	------	------
ELECTROMECHANICAL TECH.	400	300	100	100
ELECTRONIC APPLICATIONS	300	4,300	100	------
INFRA-RED, RADIOMETRY	------	100	------	------
INSULATION, ELECTRICAL	200	------	------	------
MAGNETICS, MAGNETISM	200	------	------	------
NAVIGATION	------	300	------	------
PHOTOELECTRICITY	------	------	------	------
POWER, ELECTRICAL	1,300	------	------	100
RADIO FREQ. COMPATIBILITY	------	100	------	------
RECORDING	------	100	------	------
SUPERCONDUCTIVITY	------	------	------	------
TELECOMMUNICATIONS	100	300	------	------
DYNAMICS AND MECHANICS	1,100	800	300	11,200
AERODYNAMICS	------	------	------	100
ASTRODYNAMICS	------	------	------	------
ENERGY GEN. AND CONVERSION	300	100	------	100
EXPLOSIVE EFFECTS	------	------	------	------
FLUID DYNAMICS, MECHANICS	------	------	------	400
FLUIDICS	------	------	------	100
FRICTION	------	------	------	------
GAS DYNAMICS	------	------	------	------
HIGH PRESSURE	------	------	------	------
HYDRAULICS	------	------	------	500
HYDRODYNAMICS	------	------	------	------
KINETICS	------	------	------	------
LUBRICATION	------	------	------	100
MAGNETOHYDRODYNAMICS	------	------	------	------
MASS TRANSFER	------	------	------	------
MECHANICAL APPLICATIONS	100	------	------	1,600
MECHANICAL ENGINEERING	500	500	100	7,600
MECHANICS	------	------	------	100
POWER, MECHANICAL	100	------	------	400
PROPULSION	------	------	------	100
VACUUM TECHNOLOGY	------	100	------	------

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RS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - -	10,500	10,000	200	700	300	------	200	100	100
- - - -	100	600	------	------	------	------	------	------	------
- - - -	100	800	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	2,300	200	------	100	100	------	------	------	------
- - - -	5,300	2,200	------	300	200	------	100	------	100
- - - -	------	600	------	------	------	------	------	------	------
- - - -	400	300	100	100	------	------	------	------	------
- - - -	300	4,300	100	------	------	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	------	------
- - - -	------	300	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	1,300	------	------	100	------	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	300	------	------	------	------	------	------	------
- - - -	1,100	800	300	11,200	800	100	500	900	100
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	300	100	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	400	100	------	------	100	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	500	------	------	------	------	------
- - - -	------	------	------	------	100	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	1,600	100	------	100	100	------
- - - -	500	500	100	7,600	300	100	300	500	100
- - - -	------	------	------	100	------	------	------	------	------
- - - -	100	------	------	400	------	------	------	------	------
- - - -	------	------	------	100	100	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE
AREAS OF TECHNOLOGY, CONTINUED		
ELECTROMAGNETIC	100	500
CIRCUITS, NETWORKS	------	------
COMMUNICATION	------	------
DIELECTRICS	------	------
ELECTRICAL APPLICATIONS	------	------
ELECTRICAL ENGINEERING	------	200
ELECTROMAGNETIC RADIATION	------	------
ELECTROMECHANICAL TECH.	------	100
ELECTRONIC APPLICATIONS	------	100
INFRA-RED, RADIOMETRY	------	------
INSULATION, ELECTRICAL	------	------
MAGNETICS, MAGNETISM	------	------
NAVIGATION	------	------
PHOTOELECTRICITY	------	------
POWER, ELECTRICAL	------	------
RADIO FREQ. COMPATIBILITY	------	------
RECORDING	------	------
SUPERCONDUCTIVITY	------	------
TELECOMMUNICATIONS	------	------
DYNAMICS AND MECHANICS	500	1,100
AERODYNAMICS	------	200
ASTRODYNAMICS	------	------
ENERGY GEN. AND CONVERSION	------	------
EXPLOSIVE EFFECTS	------	100
FLUID DYNAMICS, MECHANICS	------	------
FLUIDICS	------	------
FRICTION	------	------
GAS DYNAMICS	------	------
HIGH PRESSURE	------	------
HYDRAULICS	------	------
HYDRODYNAMICS	------	------
KINETICS	------	------
LUBRICATION	------	------
MAGNETOHYDRODYNAMICS	------	------
MASS TRANSFER	------	------
MECHANICAL APPLICATIONS	100	100
MECHANICAL ENGINEERING	300	400
MECHANICS	------	------
POWER, MECHANICAL	------	------
PROPULSION	------	300
VACUUM TECHNOLOGY	------	------

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ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

OGY	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
ED							
- - - - - - - -	100	500	300	100	7,100	600	2,000
- - - - - - - -	------	------	------	------	------	------	100
- - - - - - - -	------	------	------	------	100	------	200
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	500	100	300
- - - - - - - -	------	200	100	100	3,400	300	900
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	100	------	------	------	------	------
- - - - - - - -	------	100	100	------	------	100	100
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	2,900	------	300
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	100
- - - - - - - -	500	1,100	1,300	200	1,800	1,000	2,100
- - - - - - - -	------	200	------	------	------	------	200
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	400	------	------
- - - - - - - -	------	100	------	------	------	------	------
- - - - - - - -	------	------	300	------	------	100	100
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	100	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	100
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	200	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------
- - - - - - - -	100	100	100	------	------	100	400
- - - - - - - -	300	400	600	200	700	600	1,000
- - - - - - - -	------	------	------	------	------	100	100
- - - - - - - -	------	------	------	------	500	------	100
- - - - - - - -	------	300	------	------	------	------	100
- - - - - - - -	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AN

AREAS OF TECHNOLOGY	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAM
AREAS OF TECHNOLOGY, CONTINUED				
HEAT, LIGHT, APPL. PHYSICS	8,800	------	1,600	1
ACOUSTICS, SONICS	600	------	100	----
APPLIED PHYSICS	600	------	200	----
ASTRONOMY AND ASTROPHYSICS	100	------	100	----
CRYOGENICS	500	------	100	----
HEAT TRANSFER	2,800	------	700	----
HIGH TEMPERATURE	100	------	------	----
HOLOGRAPHY	------	------	------	----
ILLUMINATION, LIGHTING	300	------	------	----
INSULATION, THERMAL	100	------	------	----
OPTICS	300	------	------	----
PHOTOGRAPHY	300	------	------	----
PHYSICS	500	------	100	----
PLASMAS	200	------	100	----
RADIO ASTRONOMY	------	------	------	----
SOLID STATE	500	------	------	----
THERMODYNAMICS	1,300	------	300	----
THERMOPHYSICS	100	------	100	----
ULTRASONICS	100	------	------	----
UNDERWATER ACOUSTICS	200	------	------	----
NUCLEAR	2,600	------	100	----
NUCLEAR ENGINEERING	1,500	------	100	----
NUCLEONICS	200	------	------	----
POWER, NUCLEAR	800	------	------	----
RADIATION SAFETY	100	------	------	----
RADIOACTIVITY	------	------	------	----
ENGR.PROCESS, APPLICATION	33,600	700	2,000	2
ASSEMBLY METHODS	300	------	------	----
CONTAINERIZING, PACKAGING	200	------	------	----
DRILLING	1,400	------	------	----
DRYING	200	------	------	----
ENGINEERING	22,800	400	1,500	1
FASTENING, JOINING	200	------	------	----
FORMING, SHAPING	300	------	------	----
MATERIAL HANDLING	1,100	100	------	----
MILITARY APPLICATIONS	2,100	------	400	----
MINIATURIZATION	------	------	------	----
PRESERVING	------	------	------	----
PROCESSES	3,500	200	------	1
REFINING	1,400	------	------	----
SIZE REDUCTION	100	------	------	----

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ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

GY	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
ED									
- - - - - - - -	8,800	------	1,600	100	600	100	100	200	800
- - - - - - - -	600	------	100	------	------	------	------	------	------
- - - - - - - -	600	------	200	------	------	------	------	------	100
- - - - - - - -	100	------	100	------	------	------	------	------	------
- - - - - - - -	500	------	100	------	200	------	------	------	------
- - - - - - - -	2,800	------	700	------	100	------	------	------	300
- - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - -	300	------	------	------	100	------	------	------	------
- - - - - - - -	500	------	100	------	------	------	------	------	100
- - - - - - - -	200	------	100	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	500	------	------	------	------	------	------	------	------
- - - - - - - -	1,300	------	300	------	100	------	------	------	300
- - - - - - - -	100	------	100	------	------	------	------	------	------
- - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - -	2,600	------	100	------	300	------	------	100	200
- - - - - - - -	1,500	------	100	------	300	------	------	------	200
- - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - -	800	------	------	------	------	------	------	------	------
- - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	33,600	700	2,000	200	3,900	300	300	10,000	1,000
- - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - -	200	------	------	------	100	------	------	------	------
- - - - - - - -	1,400	------	------	------	------	------	------	100	------
- - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - -	27,800	400	1,500	100	1,600	200	200	9,200	900
- - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - -	300	------	------	------	------	------	------	------	------
- - - - - - - -	1,100	100	------	------	100	------	------	100	------
- - - - - - - -	2,100	------	400	------	------	100	100	500	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - -	3,500	200	------	100	2,000	------	------	100	------
- - - - - - - -	1,400	------	------	------	100	------	------	------	------
- - - - - - - -	100	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AN

PR

AREAS OF TECHNOLOGY	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHI MECHA EQUI
AREAS OF TECHNOLOGY, CONTINUED				
HEAT, LIGHT, APPL. PHYSICS	400	1,300	400	1,
ACOUSTICS, SONICS	------	300	------	---
APPLIED PHYSICS	------	200	------	---
ASTRONOMY AND ASTROPHYSICS	------	------	------	---
CRYOGENICS	------	------	------	
HEAT TRANSFER	100	100	------	1,
HIGH TEMPERATURE	------	------	------	---
HOLOGRAPHY	------	------	------	---
ILLUMINATION, LIGHTING	200	------	------	---
INSULATION, THERMAL	------	------	------	---
OPTICS	------	100	100	---
PHOTOGRAPHY	------	------	100	---
PHYSICS	------	100	------	---
PLASMAS	------	------	------	---
RADIO ASTRONOMY	------	------	------	---
SOLID STATE	------	400	------	---
THERMODYNAMICS	------	------	------	
THERMOPHYSICS	------	------	------	---
ULTRASONICS	------	------	------	---
UNDERWATER ACOUSTICS	------	200	------	---
NUCLEAR	300	100	------	
NUCLEAR ENGINEERING	200	------	------	
NUCLEONICS	------	------	------	---
POWER, NUCLEAR	200	------	------	
RADIATION SAFETY	------	------	------	---
RADIOACTIVITY	------	------	------	---
ENGR. PROCESS, APPLICATION	600	1,300	100	2,
ASSEMBLY METHODS	------	100	------	---
CONTAINERIZING, PACKAGING	------	------	------	---
DRILLING	------	------	------	
DRYING	------	------	------	
ENGINEERING	500	800	100	1
FASTENING, JOINING	------	------	------	---
FORMING, SHAPING	------	------	------	---
MATERIAL HANDLING	------	------	------	
MILITARY APPLICATIONS	------	300	------	---
MINIATURIZATION	------	------	------	---
PRESERVING	------	------	------	---
PROCESSES	------	------	------	
REFINING	------	------	------	---
SIZE REDUCTION	------	------	------	---

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

ERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

	PRODUCTS OR SERVICES								
	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS-PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - - -	400	1,300	400	1,500	100	------	100	300	------
- - - - -	------	300	------	------	------	------	------	------	------
- - - - -	------	200	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	100	------	------	------	------	------
- - - - -	100	100	------	1,000	------	------	------	200	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	200	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	100	100	------	------	------	------	------	------
- - - - -	------	------	100	------	------	------	------	------	------
- - - - -	------	100	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	400	------	------	------	------	------	------	------
- - - - -	------	------	------	300	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	200	------	------	------	------	------	------	------
- - - - -	300	100	------	600	100	------	------	------	------
- - - - -	200	------	------	300	100	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	200	------	------	200	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	600	1,300	100	2,300	500	------	600	700	300
- - - - -	------	100	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	100	------	------	------	------	------
- - - - -	------	------	------	100	------	------	------	------	------
- - - - -	500	800	100	1,300	400	------	300	300	200
- - - - -	------	------	------	------	------	------	------	100	------
- - - - -	------	------	------	------	------	------	100	100	------
- - - - -	------	------	------	500	------	------	------	------	100
- - - - -	------	300	------	------	100	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	------	------	------	------	------	------
- - - - -	------	------	------	100	------	------	100	------	------
- - - - -	------	------	------	------	------	------	100	------	------
- - - - -	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNI

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY

PRODUCTS

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS- PORTATION	ORDNANCE	PETROLEUM	RA R TR
AREAS OF TECHNOLOGY, CONTINUED				
HEAT, LIGHT, APPL. PHYSICS	------	100	200	-
ACOUSTICS, SONICS	------	------	------	-
APPLIED PHYSICS	------	------	------	-
ASTRONOMY AND ASTROPHYSICS	------	------	------	-
CRYOGENICS	------	------	------	-
HEAT TRANSFER	------	------	------	-
HIGH TEMPERATURE	------	------	------	-
HOLOGRAPHY	------	------	------	-
ILLUMINATION, LIGHTING	------	------	------	-
INSULATION, THERMAL	------	------	------	-
OPTICS	------	------	------	-
PHOTOGRAPHY	------	------	------	-
PHYSICS	------	------	------	-
PLASMAS	------	------	------	-
RADIO ASTRONOMY	------	------	------	-
SOLID STATE	------	------	------	-
THERMODYNAMICS	------	------	------	-
THERMOPHYSICS	------	------	------	-
ULTRASONICS	------	------	------	-
UNDERWATER ACOUSTICS	------	------	------	-
NUCLEAR	------	------	------	-
NUCLEAR ENGINEERING	------	------	------	-
NUCLEONICS	------	------	------	-
POWER, NUCLEAR	------	------	------	-
RADIATION SAFETY	------	------	------	-
RADIOACTIVITY	------	------	------	-
ENGR. PROCESS, APPLICATION	200	500	5,000	
ASSEMBLY METHODS	------	------	------	-
CONTAINERIZING, PACKAGING	------	------	------	-
DRILLING	------	------	1,100	-
DRYING	------	------	------	-
ENGINEERING	100	100	2,400	
FASTENING, JOINING	------	------	------	-
FORMING, SHAPING	------	------	------	-
MATERIAL HANDLING	------	------	------	-
MILITARY APPLICATIONS	------	300	------	-
MINIATURIZATION	------	------	------	-
PRESERVING	------	------	------	-
PROCESSES	------	------	400	-
REFINING	------	------	1,100	-
SIZE REDUCTION	------	------	------	-

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

BER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

TECHNOLOGY	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
CONTINUED							
HYSICS	------	100	200	------	100	300	300
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
YSICS	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	100	100
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	100
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	300	200	100
	------	------	------	------	100	100	100
	------	------	------	------	------	------	------
	------	------	------	------	200	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
ATION	200	500	5,000	100	700	900	1,600
	------	------	------	------	------	------	------
ING	------	------	------	------	------	------	------
	------	------	1,100	------	------	------	------
	------	------	------	------	------	------	------
	100	100	2,400	100	700	400	1,100
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	100	------
	------	300	------	------	------	100	200
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	400	------	------	200	100
	------	------	1,100	------	------	------	100
	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AN

AREAS OF TECHNOLOGY	TOTAL	AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAM
AREAS OF TECHNOLOGY, CONTINUED				
AUTOMATION AND CONTROL - - - - - - - - - -	12,800	100	2,300	
ADAPTIVE SYSTEMS - - - - - - - - - - - - - -	100	------	------	---
AUTOMATION, CYBERNETICS - - - - - - - - - - -	500	------	------	---
CONTROL (GENERAL) - - - - - - - - - - - - - -	4,300	------	800	---
GUIDANCE, STABILITY - - - - - - - - - - - - -	1,000	------	600	---
INSTRUMENTATION - - - - - - - - - - - - - - -	5,700	------	600	---
MEASUREMENT, METROLOGY - - - - - - - - - - -	500	------	------	---
SERVO-MECHANISMS - - - - - - - - - - - - - -	200	------	100	---
TELEMETRY - - - - - - - - - - - - - - - - - -	300	------	100	---
WORK MGMT, EVALUATION - - - - - - - - - -	58,100	1,100	7,600	
ARRANGEMENT - - - - - - - - - - - - - - - - -	100	------	------	---
CONFIGURATION CONTROL - - - - - - - - - - - -	300	------	200	---
COST ENGINEERING - - - - - - - - - - - - - -	2,500	100	100	---
EQUIPMENT FACILITIES - - - - - - - - - - - -	500	------	------	---
FIRE PREVENTION - - - - - - - - - - - - - - -	800	------	------	---
INDUSTRIAL ENGINEERING - - - - - - - - - - -	8,300	300	700	
MAINTAINABILITY,MAINTENANCE - - - - - - - - -	2,300	------	200	---
MANUFACTURING TECHNOLOGY - - - - - - - - - -	4,600	100	300	
MOTION AND TIME STUDY - - - - - - - - - - - -	------	------	------	---
NONDESTRUCTIVE TESTS - - - - - - - - - - - -	200	------	------	---
OPERATING PROCEDURES - - - - - - - - - - - -	1,100	------	100	---
OPERATIONS RESEARCH - - - - - - - - - - - - -	2,700	------	700	---
PLANT AND FACILITIES ENGR. - - - - - - - - -	7,000	200	200	
PRODUCT ENGINEERING - - - - - - - - - - - - -	5,000	------	400	---
PRODUCTION METHODS - - - - - - - - - - - - -	1,700	------	------	---
PRODUCTION PLANNING,CONTROL - - - - - - - - -	3,400	100	100	---
QUALITY ASSURANCE - - - - - - - - - - - - - -	1,200	------	300	---
QUALITY CONTROL - - - - - - - - - - - - - - -	1,100	------	------	---
RADIOGRAPHY, X-RAYS - - - - - - - - - - - - -	------	------	------	---
RELIABILITY - - - - - - - - - - - - - - - - -	900	------	300	---
SAFETY ENGINEERING - - - - - - - - - - - - -	600	------	100	---
SPECIFICATIONS, STANDARDS - - - - - - - - - -	900	------	------	---
SYSTEMS ENGINEERING - - - - - - - - - - - - -	8,400	------	2,400	---
TESTING-ENVIRONMENTAL - - - - - - - - - - - -	1,900	------	900	---
TESTING-LABORATORY - - - - - - - - - - - - -	1,500	------	300	---
TOOLING, TOOLS - - - - - - - - - - - - - - -	200	------	------	---
VALUE ENGINEERING - - - - - - - - - - - - - -	400	------	100	---
WORK METHODS,SIMPLIFICATION - - - - - - - - -	300	------	------	---

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

HNOLOGY	TOTAL	PRODUCTS OR SERVICES: AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
TINUED									
L - - - - - - - - - - -	12,800	100	2,300	100	800	100	500	500	300
- - - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	500	------	------	------	------	------	100	------	------
- - - - - - - - - - - -	4,300	------	800	------	200	------	200	300	200
- - - - - - - - - - - -	1,000	------	600	------	------	------	------	------	------
- - - - - - - - - - - -	5,700	------	600	------	500	------	100	200	100
- - - - - - - - - - - -	500	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	200	------	100	------	------	------	------	------	------
- - - - - - - - - - - -	300	------	100	------	------	------	------	------	------
- - - - - - - - - - -	58,100	1,100	7,600	500	5,600	1,300	2,300	5,300	1,300
- - - - - - - - - - - -	100	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	300	------	200	------	------	------	------	------	------
- - - - - - - - - - - -	2,500	100	100	------	300	------	------	800	------
- - - - - - - - - - - -	500	------	------	------	100	------	------	100	------
- - - - - - - - - - - -	800	------	------	------	100	------	------	100	------
- - - - - - - - - - - -	8,300	300	700	200	500	200	200	400	600
NCE - - - - - - - - -	2,300	------	200	------	300	------	------	400	------
- - - - - - - - - - -	4,600	100	300	100	1,200	------	200	100	100
- - - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	1,100	------	100	------	100	------	------	100	------
- - - - - - - - - - - -	2,700	------	700	------	100	100	300	100	300
R. - - - - - - - - -	7,000	200	200	100	1,200	100	------	1,800	100
- - - - - - - - - - - -	5,000	------	400	------	300	100	100	100	------
- - - - - - - - - - - -	1,700	------	------	------	200	------	------	------	------
ROL - - - - - - - - -	3,400	100	100	------	800	------	------	300	------
- - - - - - - - - - - -	1,200	------	300	------	100	------	------	100	------
- - - - - - - - - - - -	1,100	------	------	------	100	------	------	200	------
- - - - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	900	------	300	------	------	------	200	------	------
- - - - - - - - - - - -	600	------	100	------	------	------	------	100	------
S - - - - - - - - - -	900	------	------	------	------	------	------	300	------
- - - - - - - - - - - -	8,400	------	2,400	------	100	500	900	200	100
- - - - - - - - - - - -	1,900	------	900	------	------	------	100	------	------
- - - - - - - - - - - -	1,500	------	300	------	------	------	------	100	------
- - - - - - - - - - - -	200	------	------	------	------	------	------	------	------
- - - - - - - - - - - -	400	------	100	------	------	------	------	------	------
ION - - - - - - - - -	300	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSO

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PROD

PRODUCTS

AREAS OF TECHNOLOGY	ELEC-TRICAL EQUIP-MENT, SERVICES	ELEC-TRONIC EQUIP-MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT
AREAS OF TECHNOLOGY, CONTINUED				
AUTOMATION AND CONTROL - - - - - - - - - -	1,700	2,400	900	800
ADAPTIVE SYSTEMS - - - - - - - - - - - - -	------	------	------	------
AUTOMATION, CYBERNETICS - - - - - - - - - -	100	100	------	100
CONTROL (GENERAL) - - - - - - - - - - - - -	800	500	100	400
GUIDANCE, STABILITY - - - - - - - - - - - -	------	200	------	------
INSTRUMENTATION - - - - - - - - - - - - - -	700	1,400	800	200
MEASUREMENT, METROLOGY - - - - - - - - - -	100	200	100	------
SERVO-MECHANISMS - - - - - - - - - - - - -	------	100	------	------
TELEMETRY - - - - - - - - - - - - - - - - -	------	100	------	------
WORK MGMT, EVALUATION - - - - - - - - - -	2,800	4,900	400	5,300
ARRANGEMENT - - - - - - - - - - - - - - - -	------	------	------	------
CONFIGURATION CONTROL - - - - - - - - - - -	------	------	------	------
COST ENGINEERING - - - - - - - - - - - - -	100	100	------	100
EQUIPMENT FACILITIES - - - - - - - - - - -	------	------	------	100
FIRE PREVENTION - - - - - - - - - - - - - -	------	------	------	------
INDUSTRIAL ENGINEERING - - - - - - - - - -	400	400	100	700
MAINTAINABILITY,MAINTENANCE - - - - - - - -	100	100	------	300
MANUFACTURING TECHNOLOGY - - - - - - - - -	300	400	------	600
MOTION AND TIME STUDY - - - - - - - - - - -	------	------	------	------
NONDESTRUCTIVE TESTS - - - - - - - - - - -	------	------	------	------
OPERATING PROCEDURES - - - - - - - - - - -	------	------	------	------
OPERATIONS RESEARCH - - - - - - - - - - - -	100	100	------	100
PLANT AND FACILITIES ENGR. - - - - - - - -	200	100	------	800
PRODUCT ENGINEERING - - - - - - - - - - - -	700	500	------	1,400
PRODUCTION METHODS - - - - - - - - - - - -	------	100	------	100
PRODUCTION PLANNING,CONTROL - - - - - - - -	100	100	------	100
QUALITY ASSURANCE - - - - - - - - - - - - -	100	200	------	------
QUALITY CONTROL - - - - - - - - - - - - - -	100	100	------	100
RADIOGRAPHY, X-RAYS - - - - - - - - - - - -	------	------	------	------
RELIABILITY - - - - - - - - - - - - - - - -	------	200	------	------
SAFETY ENGINEERING - - - - - - - - - - - -	------	------	------	------
SPECIFICATIONS, STANDARDS - - - - - - - - -	------	200	------	------
SYSTEMS ENGINEERING - - - - - - - - - - - -	300	1,800	100	300
TESTING-ENVIRONMENTAL - - - - - - - - - - -	100	200	------	200
TESTING-LABORATORY - - - - - - - - - - - -	100	100	100	200
TOOLING, TOOLS - - - - - - - - - - - - - -	------	------	------	100
VALUE ENGINEERING - - - - - - - - - - - - -	------	------	------	------
WORK METHODS,SIMPLIFICATION - - - - - - - -	------	------	------	------

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S MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS- PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - -	1,700	2,400	900	800	100	100	200	100	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	100	------	100	------	------	------	------	------
- - - -	800	500	100	400	------	------	100	100	------
- - - -	------	200	------	------	------	------	------	------	------
- - - -	700	1,400	800	200	------	------	100	------	------
- - - -	100	200	100	------	------	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------
- - - -	------	100	------	------	------	------	------	------	------
- - - -	2,800	4,900	400	5,300	900	300	2,000	2,000	500
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	100	------	100	------	------	------	100	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	400	400	100	700	100	100	600	500	100
- - - -	100	100	------	300	100	------	100	------	100
- - - -	300	400	------	600	------	------	200	400	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	100	------	100	100	------	------	------	------
- - - -	200	100	------	800	------	------	400	100	100
- - - -	700	500	------	1,400	------	------	100	300	------
- - - -	------	100	------	100	------	------	100	100	------
- - - -	100	100	------	100	100	------	100	100	100
- - - -	100	200	------	------	100	------	100	------	------
- - - -	100	100	------	100	------	------	100	100	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	200	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	100
- - - -	------	200	------	------	------	------	------	------	------
- - - -	300	1,800	100	300	200	------	------	------	------
- - - -	100	200	------	200	------	------	------	------	------
- - - -	100	100	100	200	------	------	100	------	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AN

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TE

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETRO
AREAS OF TECHNOLOGY, CONTINUED			
AUTOMATION AND CONTROL - - - - - - - - - -	100	300	
ADAPTIVE SYSTEMS - - - - - - - - - - - - -	------	------	---
AUTOMATION, CYBERNETICS - - - - - - - - - -	------	------	---
CONTROL (GENERAL) - - - - - - - - - - - - -	------	100	
GUIDANCE, STABILITY - - - - - - - - - - - -	------	200	---
INSTRUMENTATION - - - - - - - - - - - - - -	------	100	
MEASUREMENT, METROLOGY - - - - - - - - - - -	------	------	---
SERVO-MECHANISMS - - - - - - - - - - - - -	------	------	---
TELEMETRY - - - - - - - - - - - - - - - -	------	------	---
WORK MGMT, EVALUATION - - - - - - - - - -	900	2,000	3,
ARRANGEMENT - - - - - - - - - - - - - - -	------	------	---
CONFIGURATION CONTROL - - - - - - - - - - -	------	100	---
COST ENGINEERING - - - - - - - - - - - - -	------	100	
EQUIPMENT FACILITIES - - - - - - - - - - -	------	------	---
FIRE PREVENTION - - - - - - - - - - - - - -	------	------	---
INDUSTRIAL ENGINEERING - - - - - - - - - -	200	200	
MAINTAINABILITY,MAINTENANCE - - - - - - - -	------	100	---
MANUFACTURING TECHNOLOGY - - - - - - - - -	100	------	
MOTION AND TIME STUDY - - - - - - - - - - -	------	------	---
NONDESTRUCTIVE TESTS - - - - - - - - - - -	------	------	---
OPERATING PROCEDURES - - - - - - - - - - -	------	------	
OPERATIONS RESEARCH - - - - - - - - - - - -	------	200	
PLANT AND FACILITIES ENGR. - - - - - - - - -	100	100	
PRODUCT ENGINEERING - - - - - - - - - - - -	200	100	
PRODUCTION METHODS - - - - - - - - - - - -	------	------	
PRODUCTION PLANNING,CONTROL - - - - - - - -	------	------	
QUALITY ASSURANCE - - - - - - - - - - - - -	------	100	---
QUALITY CONTROL - - - - - - - - - - - - - -	------	------	---
RADIOGRAPHY, X-RAYS - - - - - - - - - - - -	------	------	---
RELIABILITY - - - - - - - - - - - - - - - -	------	100	---
SAFETY ENGINEERING - - - - - - - - - - - -	------	------	---
SPECIFICATIONS, STANDARDS - - - - - - - - -	------	------	---
SYSTEMS ENGINEERING - - - - - - - - - - - -	------	700	
TESTING-ENVIRONMENTAL - - - - - - - - - - -	------	200	---
TESTING-LABORATORY - - - - - - - - - - - -	100	100	---
TOOLING, TOOLS - - - - - - - - - - - - - -	------	------	---
VALUE ENGINEERING - - - - - - - - - - - - -	------	------	---
WORK METHODS,SIMPLIFICATION - - - - - - - -	------	------	---

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R OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

CHNOLOGY	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
NTINUED							
OL	100	300	400	100	400	400	400
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	100	100	------	200	100	100
	------	200	------	------	------	------	------
	------	100	200	------	200	200	200
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
N	900	2,000	3,200	400	1,400	4,500	1,600
	------	------	------	------	------	------	------
	------	100	------	------	------	------	------
	------	100	200	------	200	100	100
	------	------	------	------	------	------	------
	------	------	------	------	------	500	100
	200	200	100	100	100	1,400	200
ANCE	------	100	------	------	100	100	100
Y	100	------	100	------	------	300	100
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	200	------	100	------	------
	------	200	100	------	100	400	100
GR.	100	100	400	------	400	500	100
	200	100	100	100	------	200	200
	------	------	800	------	------	100	100
TROL	------	------	900	------	100	200	100
	------	100	------	------	------	------	------
	------	------	------	------	------	100	------
	------	------	------	------	------	------	------
	------	100	------	------	------	------	------
	------	------	------	------	------	100	100
DS	------	------	------	------	100	------	------
	------	700	100	100	100	200	100
	------	200	------	------	------	100	------
	100	100	------	------	100	200	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
TION	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSO

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PROD

PROD

AREAS OF TECHNOLOGY	TOTAL	AGRICUL- TURE & FOOD	AIRCRAFT & SPACE	CERAMICS
AREAS OF TECHNOLOGY, CONTINUED				
INFORMATION, MATHEMATICS - - - - - - - - -	11,700	------	1,400	------
COMPUTER APPLICATIONS - - - - - - - - - - - -	5,900	------	400	------
DATA PROCESSING - - - - - - - - - - - - - -	1,100	------	100	------
DISPLAY - - - - - - - - - - - - - - - - - -	400	------	------	------
DRAFTING, DRAWING, GRAPHICS - - - - - - - -	900	------	100	------
INFORMATION RETRIEVAL - - - - - - - - - - -	200	------	------	------
INFORMATION THEORY - - - - - - - - - - - -	100	------	------	------
LOGIC - - - - - - - - - - - - - - - - - - -	300	------	------	------
MATHEMATICS - - - - - - - - - - - - - - - -	400	------	------	------
NEURAL NETS - - - - - - - - - - - - - - - -	------	------	------	------
REPROGRAPHY - - - - - - - - - - - - - - - -	------	------	------	------
STATISTICS - - - - - - - - - - - - - - - -	200	------	------	------
STRESS ANALYSIS - - - - - - - - - - - - - -	1,900	------	700	------
OTHER - - - - - - - - - - - - - - - - - -	10,100	300	1,300	100
NO REPORT - - - - - - - - - - - - - - - -	5,300	------	300	------

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MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

	TOTAL	PRODUCTS OR SERVICES							
		AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
- - -	11,700	------	1,400	------	300	200	5,100	700	1,000
- - -	5,900	------	400	------	200	200	3,800	200	200
- - -	1,100	------	100	------	------	------	800	------	------
- - -	400	------	------	------	------	------	100	------	------
- - -	900	------	100	------	------	------	------	200	300
- - -	200	------	------	------	------	------	------	------	100
- - -	100	------	------	------	------	------	------	------	------
- - -	300	------	------	------	------	------	200	------	------
- - -	400	------	------	------	------	------	100	------	200
- - -	------	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------
- - -	200	------	------	------	------	------	------	------	------
- - -	1,900	------	700	------	------	------	------	300	200
- - -	10,100	300	1,300	100	1,000	200	200	1,400	500
- - -	5,300	------	300	------	200	100	100	800	200

NATIONAL REGISTER OF SCIENTIFIC AND TECH

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLO

AREAS OF TECHNOLOGY	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT
AREAS OF TECHNOLOGY, CONTINUED			
INFORMATION, MATHEMATICS - - - - - - - -	200	700	100
COMPUTER APPLICATIONS - - - - - - - - - - -	100	200	------
DATA PROCESSING - - - - - - - - - - - - -	------	100	------
DISPLAY - - - - - - - - - - - - - - - - -	------	300	------
DRAFTING, DRAWING, GRAPHICS - - - - - - -	------	------	------
INFORMATION RETRIEVAL - - - - - - - - - -	------	------	------
INFORMATION THEORY - - - - - - - - - - -	------	------	------
LOGIC - - - - - - - - - - - - - - - - - -	------	------	------
MATHEMATICS - - - - - - - - - - - - - - -	------	------	------
NEURAL NETS - - - - - - - - - - - - - - -	------	------	------
REPROGRAPHY - - - - - - - - - - - - - - -	------	------	------
STATISTICS - - - - - - - - - - - - - - -	------	------	------
STRESS ANALYSIS - - - - - - - - - - - - -	------	------	------
OTHER - - - - - - - - - - - - - - - - - -	300	400	100
NO REPORT - - - - - - - - - - - - - - - -	300	200	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

F ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

	PRODUCTS OR SERVICES								
OLOGY	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB.,SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANS- PORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
NUED									
S - - - - - - - - -	200	700	100	400	100	------	100	100	------
- - - - - - - - - -	100	200	------	100	------	------	100	------	------
- - - - - - - - - -	------	100	------	------	------	------	------	------	------
- - - - - - - - - -	------	300	------	------	------	------	------	------	------
S - - - - - - - - -	------	------	------	100	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	------	------	------	------	------	------
- - - - - - - - - -	------	------	------	200	100	------	------	100	------
- - - - - - - - - -	300	400	100	700	200	------	100	100	100
- - - - - - - - - -	300	200	------	500	100	------	100	100	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL P

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND

PRODUCTS OR S

AREAS OF TECHNOLOGY	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY RAPID TRANSIT
AREAS OF TECHNOLOGY, CONTINUED				
INFORMATION, MATHEMATICS	100	100	400	100
COMPUTER APPLICATIONS	------	------	200	------
DATA PROCESSING	------	------	------	------
DISPLAY	------	------	------	------
DRAFTING, DRAWING, GRAPHICS	------	------	------	------
INFORMATION RETRIEVAL	------	------	------	------
INFORMATION THEORY	------	------	------	------
LOGIC	------	------	------	------
MATHEMATICS	------	------	100	------
NEURAL NETS	------	------	------	------
REPROGRAPHY	------	------	------	------
STATISTICS	------	------	------	------
STRESS ANALYSIS	------	------	------	------
OTHER	------	200	1,000	------
NO REPORT	------	------	300	------

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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EETING CRITERIA BY AREAS OF TECHNOLOGY AND PRODUCTS OR SERVICES--CONTINUED

	PRODUCTS OR SERVICES						
	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
- -	100	100	400	100	200	200	300
- -	------	------	200	------	100	100	100
- -	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	100
- -	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------
- -	------	------	100	------	------	------	------
- -	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	100
- -	------	200	1,000	------	400	1,100	400
- -	------	------	300	------	200	200	1,200

USE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST D

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DEGREE CURRICU				
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL
ALL AREAS OF TECHNOLOGY - - -	308,000	13,100	26,600	48,600	65,500	26,300
BIOMEDICAL - - - - - - - - - - -	1,700	100	300	200	300	100
AQUACULTURE - - - - - - - - - - -	------	------	------	------	------	------
BIOCHEMISTRY - - - - - - - - - - -	100	------	------	------	------	------
BIOENGINEERING - - - - - - - - - -	700	------	200	------	100	------
BIOLOGICAL APPLICATIONS - - - - -	100	------	------	------	------	------
BIOMECHANICS - - - - - - - - - - -	100	------	------	------	100	------
BIONICS,MEDICAL ELECTRONICS - - -	100	------	------	------	------	------
HEALTH PHYSICS - - - - - - - - - -	------	------	------	------	------	------
INDUSTRIAL HEALTH - - - - - - - - -	100	------	------	------	------	------
LIFE SUPPORT - - - - - - - - - - -	100	------	------	------	100	------
MEDICAL APPLICATIONS - - - - - -	200	------	------	------	------	------
PHYSIOLOGY - - - - - - - - - - - -	------	------	------	------	------	------
PUBLIC HEALTH - - - - - - - - - - -	200	------	------	100	------	------
BEHAVIORAL AND SOCIAL - - - -	4,300	100	800	400	500	300
ECONOMICS - - - - - - - - - - - - -	1,900	------	500	100	100	100
EDUCATIONAL TECHNOLOGY - - - - -	2,000	------	200	300	300	200
HISTORY (TECHNOLOGICAL) - - - - -	100	------	------	------	------	------
HUMAN FACTORS - - - - - - - - - - -	300	------	------	------	------	------
PSYCHOLOGY - - - - - - - - - - - -	------	------	------	------	------	------
CHEMICAL AND MATERIALS - - - -	12,400	300	5,100	600	500	800
CHEMICAL APPLICATIONS - - - - - -	4,800	------	3,500	100	100	100
COMBUSTION, FUELS - - - - - - - -	1,000	100	200	------	100	------
COATING, PLATING, CLADDING - - -	400	------	200	------	------	------
CORROSION - - - - - - - - - - - - -	400	------	200	------	------	------
CRYSTALS, CRYSTALLOGRAPHY - - - -	100	------	------	------	------	------
ELECTROCHEMISTRY - - - - - - - - -	300	------	200	------	------	------
FILAMENT TECHNOLOGY - - - - - - -	200	------	100	------	------	------
FUEL CELLS - - - - - - - - - - - -	100	------	------	------	------	------
MATERIAL APPLICATIONS - - - - - -	3,600	100	500	400	200	300
MATERIAL PROPERTIES - - - - - - -	1,400	------	200	100	------	300
THERMOCHEMISTRY - - - - - - - - -	100	------	------	------	------	------
METALLURGICAL - - - - - - - - -	12,900	100	1,100	200	200	700
BENEFICIATION, ORE PROCESS. - - -	600	------	100	100	------	------
CASTING - - - - - - - - - - - - - -	400	------	100	------	------	------
METALLURGY (GENERAL) - - - - - - -	4,300	100	300	100	100	300
METALLURGY, EXTRACTIVE - - - - - -	1,200	------	200	------	------	------
METALLURGY, PHYSICAL - - - - - - -	3,000	------	100	------	------	200
METALLURGY, POWDER - - - - - - - -	400	------	------	------	------	------
METALLURGY, PROCESS - - - - - - - -	2,300	------	300	------	------	100
WELDING - - - - - - - - - - - - - -	600	------	------	100	100	------

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INEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS

	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
-	308,000	13,100	26,600	48,600	65,500	26,300	58,500	12,800	15,400	34,300	6,800
-	1,700	100	300	200	300	100	200	------	------	500	------
-	------	------	------	------	------	------	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------
-	700	------	200	------	100	------	100	------	------	200	------
-	100	------	------	------	------	------	------	------	------	100	------
-	100	------	------	------	------	------	------	------	------	------	------
-	100	------	------	------	100	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------
-	200	------	------	------	100	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------	------	------	------
-	200	------	------	100	------	------	------	------	------	------	------
-	4,300	100	800	400	500	300	500	100	500	1,000	------
-	1,900	------	500	100	100	100	100	------	400	400	------
-	2,000	------	200	300	300	200	300	100	100	500	------
-	100	------	------	------	------	------	------	------	------	------	------
-	300	------	------	------	------	------	------	------	------	100	------
-	------	------	------	------	------	------	------	------	------	------	------
-	12,400	300	5,100	600	500	800	1,600	1,600	300	1,500	200
-	4,800	------	3,500	100	100	100	200	100	200	600	------
-	1,000	100	200	------	100	------	400	------	------	100	100
-	400	------	200	------	------	------	100	100	------	------	------
-	400	------	200	------	------	------	------	100	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------
-	300	------	200	------	------	------	------	------	------	------	------
-	200	------	100	------	------	------	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------
-	3,600	100	500	400	200	300	600	900	------	500	100
-	1,400	------	200	100	------	300	200	400	------	100	------
-	100	------	------	------	------	------	------	------	------	------	------
-	12,900	100	1,100	200	200	700	600	8,400	600	700	100
-	600	------	100	100	------	------	------	200	200	------	------
-	400	------	100	------	------	------	100	200	------	------	------
-	4,300	100	300	100	100	300	200	2,900	100	200	100
-	1,200	------	200	------	------	------	100	600	200	100	------
-	3,000	------	100	------	------	200	------	2,500	------	100	------
-	400	------	------	------	------	------	------	200	------	------	------
-	2,300	------	300	------	------	100	100	1,600	100	100	------
-	600	------	------	100	100	------	100	200	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURR

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DEGREE CURRICULA GRO					
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL
AREAS OF TECHNOLOGY, CONTINUED							
EARTH,ATMOSPHERE,MARINE - - -	10 800	100	200	1,600	500	300	800
ATMOSPHERIC SCIENCES - - - - - - -	200	------	------	------	------	------	------
DESALTING - - - - - - - - - - - - -	200	------	------	------	------	------	100
EARTH SCIENCES - - - - - - - - - -	900	------	------	200	------	------	100
GEOCHEMISTRY - - - - - - - - - - -	100	------	------	------	------	------	------
GEODESY - - - - - - - - - - - - - -	100	------	------	------	------	------	------
GEOLOGY - - - - - - - - - - - - - -	2,700	------	------	------	------	------	------
GEOPHYSICS - - - - - - - - - - - -	400	------	------	------	100	------	------
HYDROGRAPHY - - - - - - - - - - - -	------	------	------	------	------	------	------
HYDROLOGY - - - - - - - - - - - - -	1,000	------	------	700	------	------	------
MARINE SCIENCES - - - - - - - - - -	900	------	------	100	------	100	300
MINING, SURFACE - - - - - - - - - -	1,300	------	------	100	------	------	------
MINING, UNDERGROUND - - - - - - - -	1,900	------	100	100	------	------	------
MINING, UNDERWATER - - - - - - - -	100	------	------	------	------	------	------
OCEANOGRAPHY - - - - - - - - - - -	300	------	------	------	100	------	------
OFFSHORE OPERATIONS - - - - - - - -	600	------	------	200	------	------	100
UNDERWATER TECHNOLOGY - - - - - - -	200	------	------	------	100	------	100
ENVIRONMENTAL,STRUCTURAL - - -	35,900	1,100	1,000	22,600	900	1,500	3,700
AIR POLLUTION - - - - - - - - - - -	900	------	200	100	100	100	300
CONCRETE TECHNOLOGY - - - - - - - -	1,400	------	------	1,100	------	------	------
CONSERVATION, RECLAMATION - - - -	700	------	------	300	------	------	------
DRAINAGE, IRRIGATION - - - - - - -	900	------	------	400	------	------	------
ENVIRONMENTAL CONTROL - - - - - - -	3,500	100	100	400	200	300	1,700
ENVIRONMENTAL FACTORS - - - - - - -	300	------	100	------	100	------	------
NOISE REDUCTION - - - - - - - - - -	200	------	------	------	------	------	100
PHOTOGRAMMETRY - - - - - - - - - -	100	------	------	100	------	------	------
POLLUTION - - - - - - - - - - - - -	300	------	100	100	------	------	------
PUBLIC SAFETY - - - - - - - - - - -	200	------	------	100	------	------	------
ROCK MECHANICS - - - - - - - - - -	200	------	------	------	------	------	------
SANITARY ENGINEERING - - - - - - -	2,900	------	100	2,400	------	100	100
SOILS - - - - - - - - - - - - - - -	1,600	------	------	1,200	------	------	------
SOLID WASTE - - - - - - - - - - - -	100	------	------	100	------	------	------
STRUCTURES - - - - - - - - - - - -	13,300	700	100	9,800	100	700	700
SURVEYING, MAPPING - - - - - - - -	900	------	------	600	------	------	------
TRAFFIC - - - - - - - - - - - - - -	500	------	------	400	------	------	------
TRANSPORTATION - - - - - - - - - -	3,800	100	100	2,700	200	100	200
WASTE DISPOSAL - - - - - - - - - -	500	------	100	200	------	------	------
WATER POLLUTION - - - - - - - - - -	900	------	200	500	------	------	100
WATER RESOURCES AND SUPPLY - - -	2,700	------	100	1,900	------	100	100

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INEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
NUED											
- - -	10,800	100	200	1,600	500	300	800	100	5,700	1,300	100
- - - -	200	------	------	------	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	100	------	------	------	------
- - - -	900	------	------	200	------	------	100	------	500	100	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	2,700	------	------	------	------	------	------	------	2,500	100	------
- - - -	400	------	------	------	100	------	------	------	100	100	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	1,000	------	------	700	------	------	------	------	------	200	------
- - - -	900	------	------	100	------	100	300	------	------	400	------
- - - -	1,300	------	------	100	------	------	------	------	900	100	------
- - - -	1,900	------	100	100	------	------	------	100	1,400	100	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	300	------	------	------	100	------	------	------	------	100	------
- - - -	600	------	------	200	------	------	100	------	100	100	------
- - - -	200	------	------	------	100	------	100	------	------	100	------
L - - -	35,900	1,100	1,000	22,600	900	1,500	3,700	100	600	3,300	1,000
- - - -	900	------	200	100	100	100	300	------	------	100	------
- - - -	1,400	------	------	1,100	------	------	------	------	------	100	------
- - - -	700	------	------	300	------	------	------	------	100	300	------
- - - -	900	------	------	400	------	------	------	------	------	400	------
- - - -	3,500	100	100	400	200	300	1,700	------	------	400	200
- - - -	300	------	100	------	100	------	------	------	------	100	------
- - - -	200	------	------	------	------	------	100	------	------	------	------
- - - -	100	------	------	100	------	------	------	------	------	------	------
- - - -	300	------	100	100	------	------	------	------	------	------	------
- - - -	200	------	------	100	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	------	100	------	------
- - - -	2,900	------	100	2,400	------	100	100	------	------	100	100
- - - -	1,600	------	------	1,200	------	------	------	------	------	200	------
- - -	100	------	------	100	------	------	------	------	------	------	------
- - - -	13,300	700	100	9,800	100	700	700	------	------	800	300
- - - -	900	------	------	600	------	------	------	------	100	100	100
- - - -	500	------	------	400	------	------	------	------	------	------	------
- - - -	3,800	100	100	2,700	200	100	200	------	------	300	100
- - - -	500	------	100	200	------	------	------	------	------	------	------
- - - -	900	------	200	500	------	------	100	------	------	100	------
- - -	2,700	------	100	1,900	------	100	100	------	100	300	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND H

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DE			
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL
AREAS OF TECHNOLOGY, CONTINUED					
ELECTROMAGNETIC - - - - - - - -	44,800	500	300	700	33,600
CIRCUITS, NETWORKS - - - - - - - -	1,300	------	------	------	1,100
COMMUNICATION - - - - - - - - - - -	4,200	------	------	100	3,100
DIELECTRICS - - - - - - - - - - - -	100	------	------	------	100
ELECTRICAL APPLICATIONS - - - - -	4,300	100	------	100	3,000
ELECTRICAL ENGINEERING - - - - -	16,200	100	100	------	13,900
ELECTROMAGNETIC RADIATION - - - -	900	------	------	------	700
ELECTROMECHANICAL TECH. - - - - -	1,500	100	------	------	600
ELECTRONIC APPLICATIONS - - - - -	6,900	100	------	100	5,000
INFRA-RED, RADIOMETRY - - - - - -	200	------	------	------	100
INSULATION, ELECTRICAL - - - - - -	200	------	------	------	100
MAGNETICS, MAGNETISM - - - - - -	400	------	------	------	200
NAVIGATION - - - - - - - - - - -	800	------	------	------	500
PHOTOELECTRICITY - - - - - - - - -	100	------	------	------	------
POWER, ELECTRICAL - - - - - - - -	5,300	------	------	300	3,500
RADIO FREQ. COMPATIBILITY - - - -	100	------	------	------	100
RECORDING - - - - - - - - - - - -	100	------	------	------	100
SUPERCONDUCTIVITY - - - - - - - -	------	------	------	------	------
TELECOMMUNICATIONS - - - - - - - -	2,100	------	------	------	1,500
DYNAMICS AND MECHANICS - - - -	42,200	5,200	1,600	2,500	1,80
AERODYNAMICS - - - - - - - - - -	4,300	2,800	------	100	10
ASTRODYNAMICS - - - - - - - - - -	700	400	------	------	10
ENERGY GEN. AND CONVERSION - - -	1,500	------	------	100	60
EXPLOSIVE EFFECTS - - - - - - - -	200	------	100	------	-----
FLUID DYNAMICS, MECHANICS - - - -	2,500	500	300	200	-----
FLUIDICS - - - - - - - - - - - -	200	------	------	------	-----
FRICTION - - - - - - - - - - - -	100	------	------	------	-----
GAS DYNAMICS - - - - - - - - - -	500	100	------	------	-----
HIGH PRESSURE - - - - - - - - - -	100	------	------	------	-----
HYDRAULICS - - - - - - - - - - -	2,200	------	------	1,100	10
HYDRODYNAMICS - - - - - - - - - -	300	------	------	------	-----
KINETICS - - - - - - - - - - - -	300	------	200	------	-----
LUBRICATION - - - - - - - - - - -	300	------	------	------	-----
MAGNETOHYDRODYNAMICS - - - - - -	100	------	------	------	-----
MASS TRANSFER - - - - - - - - - -	400	------	300	------	-----
MECHANICAL APPLICATIONS - - - - -	3,700	100	100	200	10
MECHANICAL ENGINEERING - - - - - -	19,200	500	100	400	50
MECHANICS - - - - - - - - - - - -	1,400	100	------	200	-----
POWER, MECHANICAL - - - - - - - -	1,400	------	------	100	10
PROPULSION - - - - - - - - - - -	2,700	600	300	------	-----
VACUUM TECHNOLOGY - - - - - - - -	200	------	------	------	-----

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INEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
NUED											
- - - -	44,800	500	300	700	33,600	1,800	2,600	100	100	3,700	1,400
- - - -	1,300	------	------	------	1,100	100	------	------	------	100	------
- - - -	4,200	------	------	100	3,100	200	200	------	------	400	100
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	4,300	100	------	100	3,000	200	300	------	------	400	200
- - - -	16,200	100	100	------	13,900	400	400	------	------	800	500
- - - -	900	------	------	------	700	------	------	------	------	100	------
- - - -	1,500	100	------	------	600	100	400	------	------	200	100
- - - -	6,900	100	------	100	5,000	400	300	------	------	900	200
- - - -	200	------	------	------	100	------	------	------	------	------	------
- - - -	200	------	------	------	100	------	------	------	------	------	------
- - - -	400	------	------	------	200	------	------	------	------	100	------
- - - -	800	------	------	------	500	------	100	------	------	100	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	5,300	------	------	300	3,500	200	800	------	------	300	200
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	2,100	------	------	------	1,500	100	100	------	------	300	100
- - - -	42,200	5,200	1,600	2,500	1,800	4,100	21,900	200	600	3,400	1,000
- - - -	4,300	2,800	------	100	100	200	800	------	------	300	------
- - - -	700	400	------	------	100	100	100	------	------	100	------
- - -	1,500	------	------	100	600	100	500	------	------	100	------
- - - -	200	------	100	------	------	------	------	------	------	------	------
- - - -	2,500	500	300	200	------	300	800	------	200	200	------
- - - -	200	------	------	------	------	------	100	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	500	100	------	------	------	------	200	------	------	------	------
- - - -	100	------	------	------	------	------	100	------	------	------	------
- - - -	2,200	------	------	1,100	100	100	600	------	------	200	------
- - - -	300	------	------	------	------	------	100	------	------	100	------
- - - -	300	------	200	------	------	------	------	------	------	------	------
- - - -	300	------	------	------	------	------	200	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	400	------	300	------	------	------	------	------	------	------	------
- - - -	3,700	100	100	200	100	700	1,800	100	------	400	200
- - - -	19,200	500	100	400	500	1,500	14,100	100	200	1,300	700
- - - -	1,400	100	------	200	------	700	300	------	------	100	------
- - - -	1,400	------	------	100	100	100	1,000	------	------	100	------
- - - -	2,700	600	300	------	------	200	1,100	------	------	300	------
- - - -	200	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CUR

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DEGREE CURRICULA GR					
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHA-ICAL
AREAS OF TECHNOLOGY, CONTINUED							
HEAT, LIGHT, APPL. PHYSICS - - -	8,800	400	1,000	200	1,500	900	3,2(
ACOUSTICS, SONICS - - - - - - - - -	600	------	------	------	200	100	1(
APPLIED PHYSICS - - - - - - - - - -	600	------	------	------	200	100	1(
ASTRONOMY AND ASTROPHYSICS - - -	100	------	------	------	------	------	----
CRYOGENICS - - - - - - - - - - - -	500	------	100	------	------	------	2(
HEAT TRANSFER - - - - - - - - - - -	2,800	100	400	------	100	200	1,7(
HIGH TEMPERATURE - - - - - - - - -	100	------	------	------	------	------	----
HOLOGRAPHY - - - - - - - - - - - -	------	------	------	------	------	------	----
ILLUMINATION, LIGHTING - - - - - -	300	------	------	------	200	------	----
INSULATION, THERMAL - - - - - - - -	100	------	------	------	------	------	1(
OPTICS - - - - - - - - - - - - - -	300	------	------	------	100	------	1(
PHOTOGRAPHY - - - - - - - - - - - -	300	------	100	------	100	------	----
PHYSICS - - - - - - - - - - - - - -	500	------	------	------	100	100	----
PLASMAS - - - - - - - - - - - - - -	200	100	------	------	------	------	----
RADIO ASTRONOMY - - - - - - - - - -	------	------	------	------	------	------	----
SOLID STATE - - - - - - - - - - - -	500	------	------	------	300	100	----
THERMODYNAMICS - - - - - - - - - -	1,300	100	200	------	------	100	7(
THERMOPHYSICS - - - - - - - - - - -	100	------	------	------	------	------	----
ULTRASONICS - - - - - - - - - - - -	100	------	------	------	------	------	----
UNDERWATER ACOUSTICS - - - - - - -	200	------	------	------	200	------	----
NUCLEAR - - - - - - - - - - - -	2,600	100	400	100	400	100	9(
NUCLEAR ENGINEERING - - - - - - - -	1,500	------	300	100	100	100	4(
NUCLEONICS - - - - - - - - - - - -	200	------	------	------	100	------	----
POWER, NUCLEAR - - - - - - - - - -	800	------	100	------	100	------	4(
RADIATION SAFETY - - - - - - - - -	100	------	------	------	------	------	----
RADIOACTIVITY - - - - - - - - - - -	------	------	------	------	------	------	----
ENGR. PROCESS, APPLICATION - - -	33,600	1,000	5,700	9,500	3,000	1,700	4,4(
ASSEMBLY METHODS - - - - - - - - -	300	------	------	------	------	100	1(
CONTAINERIZING, PACKAGING - - - -	200	------	------	------	------	------	1(
DRILLING - - - - - - - - - - - - -	1,400	------	100	100	------	------	2(
DRYING - - - - - - - - - - - - - -	200	------	100	------	------	------	----
ENGINEERING - - - - - - - - - - - -	22,800	800	2,300	8,600	2,200	1,100	2,7(
FASTENING, JOINING - - - - - - - -	200	------	------	------	------	------	1(
FORMING, SHAPING - - - - - - - - -	300	------	------	------	------	------	1(
MATERIAL HANDLING - - - - - - - - -	1,100	------	------	100	100	100	4(
MILITARY APPLICATIONS - - - - - - -	2,100	200	100	500	500	100	3(
MINIATURIZATION - - - - - - - - - -	------	------	------	------	------	------	----
PRESERVING - - - - - - - - - - - -	------	------	------	------	------	------	----
PROCESSES - - - - - - - - - - - - -	3,500	------	2,500	100	100	100	3(
REFINING - - - - - - - - - - - - -	1,400	------	700	100	------	------	1(
SIZE REDUCTION - - - - - - - - - -	100	------	------	------	------	------	----

ING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
8,800	400	1,000	200	1,500	900	3,200	200	100	1,100	200
600	------	------	------	200	100	100	------	------	100	------
600	------	------	------	200	100	100	------	------	100	------
100	------	------	------	------	------	------	------	------	100	------
500	------	100	------	------	------	200	------	------	100	------
2,800	100	400	------	100	200	1,700	------	------	200	100
100	------	------	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------	------	------
300	------	------	------	200	------	------	------	------	------	------
100	------	------	------	------	------	100	------	------	------	------
300	------	------	------	100	------	100	------	------	100	------
300	------	100	------	100	------	------	------	------	100	------
500	------	------	------	100	100	------	------	------	200	------
200	100	------	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------	------	------
500	------	------	------	300	100	------	100	------	100	------
,300	100	200	------	------	100	700	------	------	100	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
200	------	------	------	200	------	------	------	------	------	------
,600	100	400	100	400	100	900	100	------	500	------
,500	------	300	100	100	100	400	100	------	300	------
200	------	------	------	100	------	------	------	------	------	------
800	------	100	------	100	------	400	------	------	100	------
100	------	------	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------	------	------
,600	1,000	5,700	9,500	3,000	1,700	4,400	500	3,200	3,400	1,100
300	------	------	------	------	100	100	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------
,400	------	100	100	------	------	200	------	900	100	------
200	------	100	------	------	------	------	------	------	100	------
,800	800	2,300	8,600	2,200	1,100	2,700	200	1,800	2,200	900
200	------	------	------	------	------	100	------	------	------	------
300	------	------	------	------	------	100	100	------	------	------
,100	------	------	100	100	100	400	------	100	200	100
,100	200	100	500	500	100	300	100	------	300	------
----	------	------	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------	------	------
,500	------	2,500	100	100	100	300	100	------	300	------
,400	------	700	100	------	------	100	------	300	100	------
100	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHE

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DEGREE				
		AERO- SPACE	CHEMICAL	CIVIL	ELEC- TRICAL	GE
AREAS OF TECHNOLOGY, CONTINUED						
AUTOMATION AND CONTROL - - - -	12,800	500	900	500	5,300	
ADAPTIVE SYSTEMS - - - - - - - -	100	------	------	------	------	
AUTOMATION, CYBERNETICS - - - - -	500	------	------	------	200	
CONTROL (GENERAL) - - - - - - - -	4,300	200	200	400	1,700	
GUIDANCE, STABILITY - - - - - - -	1,000	100	------	------	500	
INSTRUMENTATION - - - - - - - - -	5,700	100	600	100	2,200	
MEASUREMENT, METROLOGY - - - - -	500	------	------	------	200	
SERVO-MECHANISMS - - - - - - - -	200	------	------	------	100	
TELEMETRY - - - - - - - - - - - -	300	------	------	------	200	
WORK MGMT, EVALUATION - - - -	58,100	2,400	5,600	5,400	11,000	
ARRANGEMENT - - - - - - - - - - -	100	------	------	------	------	
CONFIGURATION CONTROL - - - - - -	300	------	------	------	100	
COST ENGINEERING - - - - - - - -	2,500	------	300	800	300	
EQUIPMENT FACILITIES - - - - - -	500	------	100	100	100	
FIRE PREVENTION - - - - - - - - -	800	------	100	100	100	
INDUSTRIAL ENGINEERING - - - - -	8,300	100	200	200	200	
MAINTAINABILITY, MAINTENANCE - - -	2,300	100	100	400	600	
MANUFACTURING TECHNOLOGY - - - -	4,600	100	1,200	100	500	
MOTION AND TIME STUDY - - - - - -	------	------	------	------	------	
NONDESTRUCTIVE TESTS - - - - - -	200	------	------	------	100	
OPERATING PROCEDURES - - - - - -	1,100	------	200	100	200	
OPERATIONS RESEARCH - - - - - - -	2,700	300	200	100	400	
PLANT AND FACILITIES ENGR. - - -	7,000	100	1,000	1,400	800	
PRODUCT ENGINEERING - - - - - - -	5,000	100	400	300	1,100	
PRODUCTION METHODS - - - - - - -	1,700	------	300	100	100	
PRODUCTION PLANNING, CONTROL - - -	3,400	100	800	400	200	
QUALITY ASSURANCE - - - - - - - -	1,200	100	100	100	300	
QUALITY CONTROL - - - - - - - - -	1,100	------	200	100	100	
RADIOGRAPHY, X-RAYS - - - - - - -	------	------	------	------	------	
RELIABILITY - - - - - - - - - - -	900	100	------	------	400	
SAFETY ENGINEERING - - - - - - -	600	100	100	100	100	
SPECIFICATIONS, STANDARDS - - - -	900	------	100	300	300	
SYSTEMS ENGINEERING - - - - - - -	8,400	700	200	300	4,100	
TESTING-ENVIRONMENTAL - - - - - -	1,900	300	------	------	600	
TESTING-LABORATORY - - - - - - -	1,500	100	100	200	300	
TOOLING, TOOLS - - - - - - - - -	200	------	------	------	------	
VALUE ENGINEERING - - - - - - - -	400	------	------	100	100	
WORK METHODS, SIMPLIFICATION - - -	300	------	------	------	------	

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MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
12,800	500	900	500	5,300	1,200	2,400	100	100	1,500	200
100	------	------	------	------	------	------	------	------	------	------
500	------	------	------	200	------	100	------	------	100	------
4,300	200	200	400	1,700	400	800	------	100	400	------
1,000	100	------	------	500	100	100	------	------	200	------
5,700	1C0	60C	100	2,200	600	1,100	100	100	700	100
500	------	------	------	200	------	100	------	------	100	------
200	------	------	------	100	------	100	------	------	------	------
300	------	------	------	200	------	------	------	------	------	------
58,100	2,400	5,60C	5,400	11,000	9,900	11,700	800	2,200	8,100	1,000
100	------	------	------	------	------	------	------	------	------	------
300	------	------	------	100	------	100	------	------	------	------
2,500	------	300	800	300	300	200	------	100	300	10C
500	------	100	100	100	100	200	------	------	------	------
800	------	100	100	100	100	200	------	------	200	------
8,300	100	200	200	200	4,900	900	------	100	1,600	200
2,300	100	100	400	600	200	700	------	------	200	100
4,600	100	1,200	100	500	600	1,100	200	100	600	10C
------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	100	------	------	------	------	------	------
1,100	------	200	100	200	100	100	------	200	100	------
2,700	300	200	100	400	700	200	------	100	700	------
7,000	100	1,000	1,400	800	500	2,300	------	100	600	10C
5,000	1C0	400	300	1,100	400	1,800	100	------	800	------
1,700	------	300	100	100	200	300	------	600	200	------
3,400	1C0	800	400	200	300	400	100	700	400	------
1,200	100	100	1C0	300	100	200	100	------	200	------
1,100	------	200	100	100	100	100	100	------	200	------
------	------	------	------	------	------	------	------	------	------	------
900	100	------	------	400	100	200	------	------	200	------
600	100	100	1C0	100	100	100	------	100	100	------
900	------	100	300	300	------	100	------	------	100	------
8,400	700	200	300	4,100	700	1,200	------	------	1,100	100
1,900	300	------	------	600	100	500	------	------	200	------
1,500	100	100	200	300	100	400	100	------	200	------
200	------	------	------	------	------	100	------	------	------	------
400	------	------	100	100	100	100	------	100	------	------
300	------	------	------	------	100	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CUR

AREAS OF TECHNOLOGY	TOTAL	HIGHEST DEGREE CURRICULA GR					
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHA-ICAL
AREAS OF TECHNOLOGY, CONTINUED							
INFORMATION, MATHEMATICS - - -	11,700	500	900	1,400	3,800	1,400	1,50
COMPUTER APPLICATIONS - - - - - -	5,900	200	600	400	2,500	600	50
DATA PROCESSING - - - - - - - - -	1,100	------	100	100	500	200	10
DISPLAY - - - - - - - - - - - - -	400	------	------	------	300	------	----
DRAFTING, DRAWING, GRAPHICS - - -	900	------	------	200	100	100	20
INFORMATION RETRIEVAL - - - - - -	200	------	------	------	100	------	10
INFORMATION THEORY - - - - - - -	100	------	------	------	100	------	----
LOGIC - - - - - - - - - - - - - -	300	------	------	------	300	------	----
MATHEMATICS - - - - - - - - - - -	400	------	100	------	100	------	----
NEURAL NETS - - - - - - - - - - -	------	------	------	------	------	------	----
REPROGRAPHY - - - - - - - - - - -	------	------	------	------	------	------	----
STATISTICS - - - - - - - - - - -	200	------	------	------	------	------	----
STRESS ANALYSIS - - - - - - - - - -	1,900	300	------	700	------	300	50
OTHER - - - - - - - - - - - - -	10,100	500	1,300	1,600	1,200	800	1,70
NO REPORT - - - - - - - - - - -	5,300	200	400	1,100	1,000	500	90

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AERO ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRAN (COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GE ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, (METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSIN PHYSICS, OTHER NONENGINEERING).

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INEERS MEETING CRITERIA BY AREAS OF TECHNOLOGY AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
NUED											
S - - -	11,700	500	900	1,400	3,800	1,400	1,500	100	300	1,700	100
- - - -	5,900	200	600	400	2,500	600	500	------	200	800	------
- - - -	1,100	------	100	100	500	200	100	------	------	200	------
- - - -	400	------	------	------	300	------	------	------	------	100	------
S - - -	900	------	------	200	100	100	200	------	------	200	------
- - - -	200	------	------	------	100	------	100	------	------	------	------
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	300	------	------	------	300	------	------	------	------	------	------
- - - -	400	------	100	------	100	------	------	------	------	200	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	------	------	100	------
- - - -	1,900	300	------	700	------	300	500	------	------	100	------
- - - -	10,100	500	1,300	1,600	1,200	800	1,700	200	800	1,900	100
- - - -	5,300	200	400	1,100	1,000	500	900	200	400	600	100

TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
IL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
ECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
DING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
AMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATION, CHEMISTRY,
NGINEERING).

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND

TYPES OF EMPLO

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FED GOV CIVIL EMPL
ALL PRODUCTS OR SERVICES	308,000	211,100	11,400	20,200	900	300	5,400	24,
AGRICULTURE AND FOOD - -	4,200	2,200	200	600	------	------	------	
THIS FIELD GENERALLY - - -	800	300	------	200	------	------	------	
AGRICULTURAL SERVICES - - -	600	100	------	100	------	------	------	
ANIMALS - - - - - - - - - -	100	100	------	------	------	------	------	---
DISTILLED PRODUCTS - - - -	100	100	------	------	------	------	------	---
FISH PRODUCTS - - - - - - -	------	------	------	------	------	------	------	---
FORESTRY - - - - - - - - -	100	------	------	------	------	------	------	
FOOD AND BEVERAGE PRODUCTS	1,400	1,300	------	------	------	------	------	---
NATURAL FIBERS - - - - - -	100	------	------	------	------	------	------	---
PLANTS - - - - - - - - - - -	100	------	------	------	------	------	------	---
TOBACCO - - - - - - - - - -	100	100	------	------	------	------	------	---
OTHER - - - - - - - - - - -	700	300	------	100	------	------	------	
AIRCRAFT AND SPACE - - -	33,800	24,000	300	1,300	------	------	1,100	4,
THIS FIELD GENERALLY - - -	6,100	4,000	100	200	------	------	200	1
AERONAUTICS - - - - - - - -	2,400	1,100	------	300	------	------	100	
AIRCRAFT - - - - - - - - -	4,900	4,100	------	------	------	------	------	
AIRCRAFT V/STOL - - - - - -	800	500	------	------	------	------	------	
AIRCRAFT ENGINES - - - - -	2,800	2,400	------	------	------	------	------	
AIRCRAFT PARTS, ACCESSORIES	1,900	1,800	------	------	------	------	------	
AIRCRAFT SERVICES - - - - -	200	100	------	------	------	------	------	
AIRLINES - - - - - - - - -	400	400	------	------	------	------	------	---
ASTRONAUTICS - - - - - - -	2,000	1,200	------	200	------	------	100	
LAUNCH VEHICLES - - - - - -	2,100	1,500	------	------	------	------	100	
RE-ENTRY DEVICES - - - - -	1,500	1,100	------	------	------	------	200	
SPACECRAFT - - - - - - - -	3,800	2,700	------	200	------	------	200	
SPACECRAFT ENGINES - - - -	1,300	1,000	------	100	------	------	------	
SPACECRAFT PARTS, ACCESS. -	700	600	------	------	------	------	------	
SPACECRAFT SERVICES - - - -	300	200	------	------	------	------	------	
OTHER - - - - - - - - - - -	2,500	1,500	------	200	------	------	100	
CERAMICS - - - - - - - -	2,200	1,800	------	100	------	------	100	--
THIS FIELD GENERALLY - - -	200	100	------	100	------	------	------	--
ABRASIVES - - - - - - - - -	100	100	------	------	------	------	------	--
CEMENT,CONCRETE,GYPSUM PROD	500	400	------	------	------	------	100	--
CLAY PRODUCTS - - - - - - -	100	100	------	------	------	------	------	--
GLASS PRODUCTS - - - - - -	600	600	------	------	------	------	------	--
INSULATION MATERIALS - - -	100	100	------	------	------	------	------	--
REFRACTORIES - - - - - - -	300	300	------	------	------	------	------	--
RELATED SERVICES - - - - -	------	------	------	------	------	------	------	--
OTHER - - - - - - - - - - -	200	200	------	------	------	------	------	--

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ER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER

						TYPES OF EMPLOYER							
TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
308,000	211,100	11,400	20,200	900	300	5,400	24,600	4,900	5,900	4,800	4,600	14,000
4,200	2,200	200	600	------	------	------	900	------	------	------	------	200
800	300	------	200	------	------	------	200	------	------	------	------	100
600	100	------	100	------	------	------	300	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	100	------	------	------	------	------
1,400	1,300	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
700	300	------	100	------	------	------	200	------	------	------	------	------
33,800	24,000	300	1,300	------	------	1,100	4,700	1,300	------	------	300	800
6,100	4,000	100	200	------	------	200	1,000	300	------	------	------	200
2,400	1,100	------	300	------	------	100	600	200	------	------	------	100
4,900	4,100	------	------	------	------	------	400	300	------	------	------	100
800	500	------	------	------	------	------	100	------	------	------	------	------
2,800	2,400	------	------	------	------	------	200	------	------	------	------	------
1,900	1,800	------	------	------	------	------	100	------	------	------	------	------
200	100	------	------	------	------	------	100	------	------	------	------	------
400	400	------	------	------	------	------	------	------	------	------	------	------
2,000	1,200	------	200	------	------	100	400	100	------	------	------	100
2,100	1,500	------	------	------	------	100	300	100	------	------	------	100
1,500	1,100	------	------	------	------	200	100	------	------	------	------	------
3,800	2,700	------	200	------	------	200	600	------	------	------	------	------
1,300	1,000	------	100	------	------	------	100	------	------	------	------	------
700	600	------	------	------	------	------	100	------	------	------	------	------
300	200	------	------	------	------	------	100	------	------	------	------	------
2,500	1,500	------	200	------	------	100	500	200	------	------	------	------
2,200	1,800	------	100	------	------	100	------	------	------	------	------	100
200	100	------	100	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
500	400	------	------	------	------	100	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
600	600	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF E

PRODUCTS OR SERVICES	TOTAL	TYPES OF EMPLOYER						
		PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE
PRODUCTS OR SERVICES, CONTINUED								
CHEMICALS, ALLIED PROD.	20,300	18,000	300	400	------	------	200	400
THIS FIELD GENERALLY - - -	4,300	3,500	100	200	------	------	------	------
AGRICULTURAL CHEMICALS - -	500	500	------	------	------	------	------	------
CARBON PRODUCTS - - - - - -	500	400	------	------	------	------	------	------
CHEMICAL SERVICES - - - - -	100	100	------	------	------	------	------	------
COSMETICS - - - - - - - - -	100	100	------	------	------	------	------	------
DRUGS AND PHARMACEUTICALS -	800	700	------	------	------	------	------	------
DYES AND ORGANIC PIGMENTS -	100	100	------	------	------	------	------	------
ELASTOMERS - - - - - - - -	200	200	------	------	------	------	------	------
EXPLOSIVES - - - - - - - -	300	200	------	------	------	------	------	------
FERMENTATION PRODUCTS - - -	100	------	------	------	------	------	------	------
FERTILIZER - - - - - - - -	300	300	------	------	------	------	------	------
GASES - - - - - - - - - - -	400	300	------	------	------	------	------	------
INDUSTRIAL CHEMICALS - - -	1,900	1,800	------	------	------	------	------	------
INORGANICS - - - - - - - -	500	400	------	------	------	------	------	------
NUCLEAR,RADIOACT. MATERIALS	1,000	600	------	------	------	------	100	100
ORGANICS - - - - - - - - -	1,000	900	------	------	------	------	------	------
PAINTS AND COATINGS - - - -	300	300	------	------	------	------	------	------
PETROCHEMICALS - - - - - -	2,200	2,100	------	------	------	------	------	------
PHOTOGRAPHIC CHEMICALS - -	200	200	------	------	------	------	------	------
PLASTICS,SYNTHETIC POLYMERS	2,700	2,600	------	100	------	------	------	------
PROPELLANTS - - - - - - - -	300	200	------	------	------	------	------	100
SOAP AND DETERGENTS - - - -	400	400	------	------	------	------	------	------
SYNTHETIC FIBERS - - - - -	1,000	1,000	------	------	------	------	------	------
OTHER - - - - - - - - - - -	1,100	900	------	100	------	------	------	------
COMMUNICATIONS - - - - -	8,100	6,500	100	100	------	------	100	500
THIS FIELD GENERALLY - - -	2,600	1,900	100	100	------	------	100	300
BROADCASTING - - - - - - -	500	400	------	------	------	------	------	------
CABLE TELEVISION - - - - -	100	100	------	------	------	------	------	------
COMMUNICATION SERVICES - -	1,100	900	------	------	------	------	------	100
MOTION PICTURES - - - - - -	------	------	------	------	------	------	------	------
TELEGRAPH - - - - - - - - -	100	100	------	------	------	------	------	------
TELEPHONE - - - - - - - - -	2,800	2,500	------	------	------	------	------	------
OTHER - - - - - - - - - - -	800	600	------	------	------	------	------	100

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ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

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TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
						TYPES OF EMPLOYER						
20,300	18,000	300	400	------	------	200	400	100	------	------	200	800
4,300	3,500	100	200	------	------	------	------	------	------	------	------	400
500	500	------	------	------	------	------	------	------	------	------	------	------
500	400	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
800	700	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
400	300	------	------	------	------	------	------	------	------	------	------	------
1,900	1,800	------	------	------	------	------	------	------	------	------	------	100
500	400	------	------	------	------	------	------	------	------	------	------	------
1,000	600	------	------	------	------	100	100	------	------	------	100	------
1,000	900	------	------	------	------	------	------	------	------	------	------	------
300	300	------	------	------	------	------	------	------	------	------	------	------
2,200	2,100	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
2,700	2,600	------	100	------	------	------	------	------	------	------	------	100
300	200	------	------	------	------	------	100	------	------	------	------	------
400	400	------	------	------	------	------	------	------	------	------	------	------
1,000	1,000	------	------	------	------	------	------	------	------	------	------	------
1,100	900	------	100	------	------	------	------	------	------	------	------	------
8,100	6,500	100	100	------	------	100	500	100	------	------	200	400
2,600	1,900	100	100	------	------	100	300	100	------	------	------	100
500	400	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
1,100	900	------	------	------	------	------	100	------	------	------	------	100
------	------	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
2,800	2,500	------	------	------	------	------	------	------	------	------	100	200
800	600	------	------	------	------	------	100	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SE

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SE ELE OTH SCH
PRODUCTS OR SERVICES, CONTINUED						
COMPUTERS	11,100	9,600	200	300	------	---
THIS FIELD GENERALLY	4,000	3,400	100	100	------	---
ANALOG EQUIPMENT	200	100	------	------	------	---
COMPONENTS AND PARTS	400	400	------	------	------	---
COMPUTER SERVICES	1,000	900	------	------	------	---
DIGITAL EQUIPMENT	1,900	1,700	------	------	------	---
HYBRID EQUIPMENT	200	200	------	------	------	---
MEMORY UNITS	300	300	------	------	------	---
OPTICAL EQUIPMENT	100	100	------	------	------	---
PERIPHERAL EQUIPMENT	1,100	1,000	------	------	------	---
SOFTWARE	1,400	1,100	------	100	------	---
OTHER	500	400	------	------	------	---
CONSTRUCTION,CIVIL ENGR.	49,200	22,100	4,200	1,500	100	---
THIS FIELD GENERALLY	10,600	5,100	1,300	300	------	---
AIRPORTS AND FACILITIES	700	200	------	------	------	---
ARCHITECTURE	600	300	200	------	------	---
BRIDGES	2,200	800	100	------	------	---
BUILDINGS AND STRUCTURES	8,100	4,700	1,300	400	------	---
CHEMICAL PLANTS, FACILITIES	1,700	1,500	------	------	------	---
CITY,REGION.,URBAN PLANNING	700	200	------	------	------	---
CONSTRUCTION SERVICES	900	700	100	------	------	---
DAMS, WATER CONTROL STRUCT.	2,600	300	------	100	------	---
EXCAVATION AND FOUNDATION	700	400	100	100	------	---
HEAVY CONSTRUCTION	1,100	800	100	------	------	---
HIGHWAYS	5,200	1,100	100	200	------	---
HYDRO-ELECTRIC FACILITIES	500	200	------	------	------	---
INDUST. PLANTS, FACILITIES	2,100	1,900	100	------	------	---
LANDSCAPING	------	------	------	------	------	---
MILITARY CONSTRUCTION	1,200	100	------	------	------	---
PREFABRICATED CONSTRUCTION	300	200	------	------	------	---
PUBLIC WORKS	2,700	600	200	------	------	---
RECREATIONAL FACILITIES	100	------	------	------	------	---
RIVERS AND HARBORS	500	100	------	------	------	---
SANITARY FACILITIES	1,900	900	200	100	------	---
SPACECRAFT,MISSILE FACILIT.	200	100	------	------	------	---
SURVEYING AND MAPPING	700	100	200	------	------	---
THIN-SHELL CONSTRUCTION	100	100	------	------	------	---
TUNNELING	200	100	------	------	------	---
WATER SUPPLY AND TREATMENT	1,400	600	100	100	------	---
OTHER	2,200	1,000	100	100	------	---

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R OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
NTINUED													
- -	11,100	9,600	200	300	------	------	300	400	100	------	------	100	100
- -	4,000	3,400	100	100	------	------	100	200	------	------	------	------	100
- -	200	100	------	------	------	------	------	------	------	------	------	------	------
- -	400	400	------	------	------	------	------	------	------	------	------	------	------
- -	1,000	900	------	------	------	------	------	------	------	------	------	------	------
- -	1,900	1,700	------	------	------	------	------	100	------	------	------	------	------
- -	200	200	------	------	------	------	------	------	------	------	------	------	------
- -	300	300	------	------	------	------	------	------	------	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	1,100	1,000	------	------	------	------	------	------	------	------	------	------	------
- -	1,400	1,100	------	100	------	------	100	------	------	------	------	------	------
- -	500	400	------	------	------	------	------	------	------	------	------	------	------
GR.	49,200	22,100	4,200	1,500	100	------	400	7,300	1,400	4,800	3,100	1,000	3,400
- -	10,600	5,100	1,300	300	------	------	100	1,100	300	300	400	200	1,300
- -	700	200	------	------	------	------	------	200	100	------	------	100	------
- -	600	300	200	------	------	------	------	------	------	------	------	------	100
- -	2,200	800	100	------	------	------	------	100	------	800	100	100	100
-	8,100	4,700	1,300	400	------	------	100	600	------	100	300	100	400
IES	1,700	1,500	------	------	------	------	------	------	------	------	------	------	100
ING	700	200	------	------	------	------	------	100	------	100	200	------	100
- -	900	700	100	------	------	------	------	------	------	------	------	------	------
CT.	2,600	300	------	100	------	------	------	1,600	------	200	100	------	100
N -	700	400	100	100	------	------	------	100	------	------	------	------	------
- -	1,100	800	100	------	------	------	------	100	------	------	------	------	100
- -	5,200	1,100	100	200	------	------	100	600	------	2,500	400	------	300
S -	500	200	------	------	------	------	------	200	------	------	------	------	100
ES	2,100	1,900	100	------	------	------	------	100	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------	------	------
- -	1,200	100	------	------	------	------	------	500	500	------	------	------	100
ON	300	200	------	------	------	------	------	------	------	------	------	------	------
- -	2,700	600	200	------	------	------	------	400	100	100	1,100	------	100
- -	100	------	------	------	------	------	------	100	------	------	------	------	------
- -	500	100	------	------	------	------	------	300	------	------	------	------	------
- -	1,900	900	200	100	------	------	------	100	100	200	200	100	100
IT.	200	100	------	------	------	------	------	------	------	------	------	------	------
- -	700	100	200	------	------	------	------	100	------	------	------	------	100
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	200	100	------	------	------	------	------	------	------	------	------	------	------
NT	1,400	600	100	100	------	------	------	200	------	100	100	100	100
- -	2,200	1,000	100	100	------	------	------	600	100	100	100	100	100

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND

TYPES OF

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL
PRODUCTS OR SERVICES, CONTINUED							
EDUC., INFORMATION SERV.	15,400	700	100	12,100	800	200	300
THIS FIELD GENERALLY - - -	2,500	100	------	1,800	100	100	100
ENGINEERING INSTRUCTION - -	10,400	200	------	9,100	300	------	------
INFORMATION SERVICES - - -	400	100	------	100	------	------	100
LIBRARIES - - - - - - - - -	------	------	------	------	------	------	------
TECHNICAL INSTRUCTION - - -	1,200	100	------	600	300	100	------
OTHER - - - - - - - - - - -	900	100	------	500	------	100	100
ELECTRICAL EQUIP., SERV.	20,400	16,500	800	100	------	------	200
THIS FIELD GENERALLY - - -	4,100	2,700	300	100	------	------	100
BUSINESS, OFFICE EQUIPMENT	600	600	------	------	------	------	------
COMPONENTS AND ACCESSORIES	800	700	------	------	------	------	------
CONTROLS - - - - - - - - -	1,500	1,300	------	------	------	------	------
ELECTRICAL SERVICES - - - -	400	200	100	------	------	------	------
HOUSEHOLD APPLIANCES - - -	600	600	------	------	------	------	------
INDUSTRIAL ELEC. EQUIPMENT	2,800	2,600	100	------	------	------	------
INSTRUMENTS, TEST EQUIPMENT	1,300	1,000	100	------	------	------	------
INSULATED CONDUCTORS - - -	400	400	------	------	------	------	------
LIGHTING AND WIRING - - - -	500	300	100	------	------	------	------
MAGNETIC DEVICES - - - - -	300	300	------	------	------	------	------
POWER GENERATION - - - - -	2,200	1,700	100	------	------	------	------
RURAL ELECTRIFICATION - - -	200	100	------	------	------	------	------
STORAGE BATTERIES - - - - -	100	100	------	------	------	------	------
SWITCHGEAR - - - - - - - -	600	600	------	------	------	------	------
TELEPHONE EQUIPMENT - - - -	600	500	------	------	------	------	------
TRANSFORMERS - - - - - - -	900	800	------	------	------	------	------
TRANSMISSION, DISTRIBUTION	1,700	1,300	------	------	------	------	------
WELDING APPARATUS - - - - -	200	200	------	------	------	------	------
OTHER - - - - - - - - - - -	800	700	------	------	------	------	------

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R OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

		TYPES OF EMPLOYER											
	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
NTINUED													
RV.	15,400	700	100	12,100	800	200	300	200	200	100	------	------	700
-	2,500	100	------	1,800	100	100	100	------	------	------	------	------	100
-	10,400	200	------	9,100	300	------	------	100	100	100	------	------	500
-	400	100	------	100	------	------	100	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------	------	------	------	------	------
-	1,200	100	------	600	300	100	------	------	------	------	------	------	100
-	900	100	------	500	------	100	100	------	------	------	------	------	100
RV.	20,400	16,500	800	100	------	------	200	1,000	------	100	200	300	1,200
-	4,100	2,700	300	100	------	------	100	300	------	------	------	100	600
NT	600	600	------	------	------	------	------	------	------	------	------	------	------
ES	800	700	------	------	------	------	------	------	------	------	------	------	------
-	1,500	1,300	------	------	------	------	------	100	------	------	------	------	------
-	400	200	100	------	------	------	------	------	------	------	------	------	------
-	600	600	------	------	------	------	------	------	------	------	------	------	------
NT	2,800	2,600	100	------	------	------	------	------	------	------	------	------	100
ENT	1,300	1,000	100	------	------	------	------	100	------	------	------	------	100
-	400	400	------	------	------	------	------	------	------	------	------	------	------
-	500	300	100	------	------	------	------	------	------	------	------	------	------
-	300	300	------	------	------	------	------	------	------	------	------	------	------
-	2,200	1,700	100	------	------	------	------	200	------	------	------	100	100
-	200	100	------	------	------	------	------	100	------	------	------	------	------
-	100	100	------	------	------	------	------	------	------	------	------	------	------
-	600	600	------	------	------	------	------	------	------	------	------	------	------
-	600	500	------	------	------	------	------	------	------	------	------	------	------
-	900	800	------	------	------	------	------	------	------	------	------	------	------
ON	1,700	1,300	------	------	------	------	------	200	------	------	------	100	100
-	200	200	------	------	------	------	------	------	------	------	------	------	------
-	800	700	------	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND

TYPES OF

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL
PRODUCTS OR SERVICES, CONTINUED							
ELECTRONIC EQUIP., SERV.	23,500	19,200	400	500	------	------	500
THIS FIELD GENERALLY - - -	5,500	4,000	200	200	------	------	200
ANTENNAS - - - - - - - - - -	700	500	------	------	------	------	------
AUDIO - - - - - - - - - - - -	200	200	------	------	------	------	------
COMPONENTS AND ACCESSORIES	900	800	------	------	------	------	------
CONTROLS - - - - - - - - - -	1,000	800	------	------	------	------	------
ELECTROACOUSTIC TRANSDUCERS	------	------	------	------	------	------	------
ELECTRO-OPTICAL DEVICES - -	900	800	------	------	------	------	------
ELECTRON TUBES - - - - - - -	800	700	------	------	------	------	------
ELECTRONIC EQUIP. GENERALLY	3,300	2,800	100	100	------	------	------
ELECTRONIC SERVICES - - - -	200	100	------	------	------	------	------
INSTRUMENTS, TEST EQUIPMENT	2,700	2,300	------	------	------	------	------
INTEGRATED CIRCUITS - - - -	700	600	------	------	------	------	------
LASERS - - - - - - - - - - -	200	100	------	------	------	------	------
MICROWAVE AND RADAR - - - -	2,600	2,100	------	100	------	------	100
RADIO AND TV RECEIVERS - -	400	400	------	------	------	------	------
RADIO AND TV TRANSMITTERS -	100	100	------	------	------	------	------
RECORDING - - - - - - - - -	200	200	------	------	------	------	------
SEMICONDUCTOR DEVICES - - -	1,000	1,000	------	------	------	------	------
SONAR - - - - - - - - - - -	600	400	------	------	------	------	------
SONIC, ULTRASONIC DEVICES -	100	100	------	------	------	------	------
THERMO-ELECTRIC DEVICES - -	100	100	------	------	------	------	------
X-RAY - - - - - - - - - - -	100	100	------	------	------	------	------
OTHER - - - - - - - - - - -	1,200	1,000	------	------	------	------	------
LAB-SCI-PHOTO-OPT EQUIP.	2,900	2,200	100	100	------	------	100
THIS FIELD GENERALLY - - -	700	400	100	100	------	------	------
LAB., SCIENTIFIC APPARATUS	500	300	------	------	------	------	------
MEASURING,CONTROL INSTRUM.	800	700	------	------	------	------	------
OPTICAL INSTRUMENTS, LENSES	200	200	------	------	------	------	------
PHOTOGRAPHIC EQUIPMENT - -	300	200	------	------	------	------	------
TEMPERATURE MEASUREMENT - -	200	100	------	------	------	------	------
TIMING DEVICES - - - - - -	------	------	------	------	------	------	------
OTHER - - - - - - - - - - -	200	100	------	------	------	------	------

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ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

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TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
23,500	19,200	400	500	------	------	500	2,100	100	------	------	200	500
5,500	4,000	200	200	------	------	200	600	100	------	------	------	200
700	500	------	------	------	------	------	100	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
900	800	------	------	------	------	------	100	------	------	------	------	------
1,000	800	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
900	800	------	------	------	------	------	100	------	------	------	------	------
800	700	------	------	------	------	------	------	------	------	------	------	------
3,300	2,800	100	100	------	------	------	200	------	------	------	------	100
200	100	------	------	------	------	------	------	------	------	------	------	------
2,700	2,300	------	------	------	------	------	200	------	------	------	------	100
700	600	------	------	------	------	------	100	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
2,600	2,100	------	100	------	------	100	300	------	------	------	------	------
400	400	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
1,000	1,000	------	------	------	------	------	------	------	------	------	------	------
600	400	------	------	------	------	------	200	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
100	100	------	------	------	------	------	------	------	------	------	------	------
1,200	1,000	------	------	------	------	------	100	------	------	------	------	------
2,900	2,700	100	100	------	------	100	300	------	------	------	------	100
700	400	100	100	------	------	------	100	------	------	------	------	------
500	300	------	------	------	------	------	------	------	------	------	------	------
800	700	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND

TYPES O

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFI ORG. OTHER THAN SCHOO
PRODUCTS OR SERVICES, CONTINUED							
MACHINERY, MECH. EQUIP.	30,100	23,800	2,100	500	------	------	30
THIS FIELD GENERALLY - - -	5,100	3,300	300	200	------	------	10
AIR COMPRESSORS, BLOWERS -	900	800	------	------	------	------	-----
AIR CONDITIONING, HEATING	8,300	6,100	1,300	100	------	------	-----
BEARINGS - - - - - - - - - -	500	500	------	------	------	------	-----
CONSTRUCTION EQUIPMENT - -	600	500	------	------	------	------	-----
DIES, JIGS, PATTERNS - - -	100	100	------	------	------	------	-----
DISTILLING EQUIPMENT - - -	100	------	------	------	------	------	-----
FARM MACHINERY - - - - - -	1,400	1,200	------	100	------	------	-----
FOOD MACHINERY - - - - - -	200	200	------	------	------	------	-----
FURNACES, HEATING EQUIPMENT	900	700	100	------	------	------	-----
GEARS - - - - - - - - - - -	100	100	------	------	------	------	-----
HYDRAULIC MACHINERY - - - -	400	300	------	------	------	------	-----
INDUSTRIAL MACHINERY,EQUIP.	1,400	1,300	100	------	------	------	-----
INTERNAL COMBUSTION ENGINES	500	400	------	------	------	------	-----
MACHINE TOOLS, ACCESSORIES	700	600	------	------	------	------	-----
MATERIALS HANDLING MACH. -	800	700	------	------	------	------	-----
MINING MACHINERY - - - - -	300	300	------	------	------	------	-----
NUCLEAR MACHINERY - - - - -	1,200	900	------	------	------	------	10
PAPER MACHINERY - - - - - -	300	200	------	------	------	------	-----
PNEUMATIC EQUIPMENT - - - -	300	300	------	------	------	------	-----
POWER TRANSMISSION EQUIP.	300	300	------	------	------	------	-----
PRINTING, DUPLICATING MACH.	200	200	------	------	------	------	-----
PUMPS,LIQUID HANDLING EQUIP	1,200	1,000	100	------	------	------	-----
REFRIGERATING EQUIPMENT - -	700	600	------	------	------	------	-----
SPECIALIZED INDUSTRIAL MACH	1,000	900	------	------	------	------	-----
STEAM ENGINES - - - - - - -	100	------	------	------	------	------	-----
TEXTILE MACHINERY - - - - -	200	200	------	------	------	------	-----
TURBINES - - - - - - - - -	800	800	------	------	------	------	-----
VENDING, SERVICE MACHINERY	------	------	------	------	------	------	-----
OTHER - - - - - - - - - - -	1,500	1,200	------	------	------	------	-----

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

R OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
NTINUED													
P.	30,100	23,800	2,100	500	------	------	300	900	100	100	100	400	1,700
- -	5,100	3,300	300	200	------	------	100	300	100	100	------	100	700
-	900	800	------	------	------	------	------	------	------	------	------	------	------
G	8,300	6,100	1,300	100	------	------	------	200	------	------	------	200	400
- -	500	500	------	------	------	------	------	------	------	------	------	------	------
- -	600	500	------	------	------	------	------	------	------	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------	------	------
- -	1,400	1,200	------	100	------	------	------	100	------	------	------	------	------
- -	200	200	------	------	------	------	------	------	------	------	------	------	------
ENT	900	700	100	------	------	------	------	------	------	------	------	------	------
- -	100	100	------	------	------	------	------	------	------	------	------	------	------
- -	400	300	------	------	------	------	------	------	------	------	------	------	------
IP.	1,400	1,300	100	------	------	------	------	------	------	------	------	------	------
NES	500	400	------	------	------	------	------	------	------	------	------	------	------
ES	700	600	------	------	------	------	------	------	------	------	------	------	------
-	800	700	------	------	------	------	------	------	------	------	------	------	------
- -	300	300	------	------	------	------	------	------	------	------	------	------	------
- -	1,200	900	------	------	------	------	100	200	------	------	------	100	------
- -	300	200	------	------	------	------	------	------	------	------	------	------	------
- -	300	300	------	------	------	------	------	------	------	------	------	------	------
.	300	300	------	------	------	------	------	------	------	------	------	------	------
CH.	200	200	------	------	------	------	------	------	------	------	------	------	------
UIP	1,200	1,000	100	------	------	------	------	------	------	------	------	------	------
- -	700	600	------	------	------	------	------	------	------	------	------	------	------
ACH	1,000	900	------	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------	------	------
- -	200	200	------	------	------	------	------	------	------	------	------	------	------
- -	800	800	------	------	------	------	------	------	------	------	------	------	------
RY	------	------	------	------	------	------	------	------	------	------	------	------	------
- -	1,500	1,200	------	------	------	------	------	------	------	------	------	------	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICE

TY

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL
PRODUCTS OR SERVICES, CONTINUED						
MARINE TRANSPORTATION -	5,000	2,800	100	100	------	------
THIS FIELD GENERALLY - - -	700	400	------	------	------	------
BOATS AND SMALL CRAFT - - -	200	100	------	------	------	------
INLAND WATERWAY CRAFT,SERV.	------	------	------	------	------	------
MARINE AUXILIARIES - - - -	100	------	------	------	------	------
MARINE ENGINES - - - - - -	100	100	------	------	------	------
MERCHANT SHIPS - - - - - -	300	200	------	------	------	------
NAVAL ARCHITECTURAL SER. -	700	300	100	------	------	------
NAVAL VESSELS - - - - - -	1,000	400	------	------	------	------
OCEAN TRANSPORTATION - - -	200	100	------	------	------	------
PORT FACILITIES, SERVICES	100	------	------	------	------	------
PROPELLERS AND SHAFTING -	------	------	------	------	------	------
SHIPBUILDING,REPAIR SERVICE	800	500	------	------	------	------
UNDERWATER CRAFT - - - - -	400	300	------	------	------	------
OTHER - - - - - - - - - -	300	200	------	------	------	------
MEDICAL, HEALTH SERVICES	1,300	500	------	200	------	------
THIS FIELD GENERALLY - - -	400	100	------	100	------	------
ARTIFICIAL ORGANS - - - -	100	------	------	------	------	------
MEDICAL AND HEALTH CARE - -	200	100	------	------	------	------
MEDICAL, DENTAL INSTRUMENTS	200	200	------	------	------	------
MEDICAL LABORATORY SERVICES	------	------	------	------	------	------
PROSTHETIC DEVICES - - - -	------	------	------	------	------	------
OTHER - - - - - - - - - - -	400	100	------	100	------	------
METALS, BASIC - - - - -	13,500	10,700	200	800	------	------
THIS FIELD GENERALLY - - -	2,600	1,200	100	500	------	------
ALUMINUM - - - - - - - - -	1,300	1,200	------	------	------	------
COPPER - - - - - - - - - -	500	400	------	------	------	------
ELECTROMETALLURGICAL PROD.	200	100	------	------	------	------
FOUNDRIES - - - - - - - - -	600	600	------	------	------	------
IRON-STEEL MILLS, FOUNDRIES	3,900	3,700	------	------	------	------
LEAD AND ZINC - - - - - - -	300	200	------	------	------	------
METALLURGICAL PRODUCTS - -	800	700	------	------	------	------
METALLURGICAL SERVICES - -	1,100	800	------	100	------	------
NON-FERROUS SMELTING - - -	800	700	------	------	------	------
NON-FERROUS CASTINGS - - -	200	100	------	------	------	------
RADIOACTIVE METALS - - - -	100	------	------	------	------	------
RARE METALS - - - - - - - -	------	------	------	------	------	------
REFRACTORY METALS - - - - -	300	200	------	------	------	------
OTHER - - - - - - - - - - -	900	600	------	100	------	------

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)F ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

INUED

TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
5,000	2,800	100	100	------	------	100	1,100	500	------	------	100	20C
700	400	------	------	------	------	------	100	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
1CC	100	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	------	------	------	------	------	------
700	300	100	------	------	------	------	100	------	------	------	------	100
1,000	400	------	------	------	------	------	400	200	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
800	500	------	------	------	------	------	100	100	------	------	------	------
400	300	------	------	------	------	------	100	------	------	------	------	------
300	200	------	------	------	------	------	100	------	------	------	------	------
1,300	500	------	200	------	------	200	100	100	------	------	------	------
400	100	------	100	------	------	100	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
200	200	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
400	100	------	100	------	------	------	------	100	------	------	------	------
13,500	10,700	200	800	------	------	400	500	------	------	------	100	800
2,600	1,200	100	500	------	------	200	200	------	------	------	------	40C
1,300	1,200	------	------	------	------	------	------	------	------	------	------	------
500	400	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------	------
600	600	------	------	------	------	------	------	------	------	------	------	------
3,900	3,700	------	------	------	------	------	------	------	------	------	------	100
300	200	------	------	------	------	------	------	------	------	------	------	------
800	700	------	------	------	------	------	------	------	------	------	------	------
1,100	800	------	100	------	------	------	------	------	------	------	------	1CC
800	700	------	------	------	------	------	------	------	------	------	------	10C
2CC	100	------	------	------	------	------	------	------	------	------	------	------
1CC	------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------	------
300	200	------	------	------	------	------	100	------	------	------	------	------
900	600	------	100	------	------	------	100	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER

PRODUCTS OR SERVICES	TOTAL	TYPES OF EMPLOYER: PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE
PRODUCTS OR SERVICES, CONTINUED									
METAL FABRICATED PROD.	6,500	5,700	200	100	------	------	100	100	------
THIS FIELD GENERALLY - - -	1,400	1,200	100	------	------	------	------	------	------
BOILERS - - - - - - - - - -	500	400	------	------	------	------	------	------	------
CANS AND CONTAINERS - - - -	100	100	------	------	------	------	------	------	------
ELECTROPLATED, COATED PROD.	200	100	------	------	------	------	------	------	------
HARDWARE - - - - - - - - -	100	100	------	------	------	------	------	------	------
MACHINED OR TURNED PRODUCTS	300	300	------	------	------	------	------	------	------
METAL FABRICATION SERVICES	400	400	------	------	------	------	------	------	------
PIPE, FITTINGS, VALVES - -	700	600	------	------	------	------	------	------	------
PRESSURE VESSELS - - - - -	600	500	------	------	------	------	------	------	------
SHEET METAL PRODUCTS - - -	300	300	------	------	------	------	------	------	------
STAMPINGS - - - - - - - - -	200	200	------	------	------	------	------	------	------
STRUCTURAL STEEL PRODUCTS	400	400	------	------	------	------	------	------	------
WELDMENTS - - - - - - - - -	200	100	------	------	------	------	------	------	------
WIRE PRODUCTS - - - - - - -	300	300	------	------	------	------	------	------	------
OTHER - - - - - - - - - - -	700	600	------	------	------	------	------	------	------
MINING - - - - - - - - -	6,600	4,600	400	200	------	------	------	600	------
THIS FIELD GENERALLY - - -	2,000	1,000	200	100	------	------	------	300	------
COAL - - - - - - - - - - -	800	600	------	------	------	------	------	100	------
IRON ORES - - - - - - - - -	600	500	------	------	------	------	------	------	------
MINING SERVICES - - - - - -	300	100	------	------	------	------	------	------	------
NON-FERROUS METAL ORES - -	1,400	1,200	------	------	------	------	------	------	------
NON-METALLIC MINERALS - - -	500	400	------	------	------	------	------	------	------
QUARRY PRODUCTS - - - - - -	200	100	------	------	------	------	------	------	------
SULFUR - - - - - - - - - -	100	100	------	------	------	------	------	------	------
URANIUM, RADIOACTIVE ORES	300	200	------	------	------	------	------	------	------
OTHER - - - - - - - - - - -	300	200	------	------	------	------	------	100	------
MOTOR VEHICLE TRANS. - -	2,600	2,000	------	100	------	------	------	100	------
THIS FIELD GENERALLY - - -	500	300	------	------	------	------	------	------	------
AUTOMOBILES - - - - - - - -	800	700	------	100	------	------	------	------	------
BUSES, TRUCKS, TRAILERS - -	300	200	------	------	------	------	------	------	------
ENGINES - - - - - - - - - -	200	200	------	------	------	------	------	------	------
MOTORCYCLES, ETC. - - - - -	------	------	------	------	------	------	------	------	------
MOTOR TRANSPORTATION SERV.	------	------	------	------	------	------	------	------	------
PARTS AND ACCESSORIES - - -	600	500	------	------	------	------	------	------	------
OTHER - - - - - - - - - - -	200	100	------	------	------	------	------	------	------

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MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER											
PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
5,700	200	100	------	------	100	100	------	------	------	------	200
1,200	100	------	------	------	------	------	------	------	------	------	100
400	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	------	------	------	------	------
500	------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	------	------	------	------	------
4,600	400	200	------	------	------	600	------	100	------	------	700
1,000	200	100	------	------	------	300	------	------	------	------	300
600	------	------	------	------	------	100	------	------	------	------	100
500	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	100
1,200	------	------	------	------	------	------	------	------	------	------	100
400	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------	------
2,000	------	100	------	------	------	100	------	100	------	------	100
300	------	------	------	------	------	------	------	------	------	------	------
700	------	100	------	------	------	------	------	------	------	------	100
200	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
500	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TE

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SE

PRODUCTS OR SERVICES	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SE ELE OTH SCH
PRODUCTS OR SERVICES, CONTINUED						
ORDNANCE - - - - - - - -	5,200	2,800	------	100	------	--
THIS FIELD GENERALLY - - -	1,200	500	------	------	------	--
AMMUNITION - - - - - - - -	300	100	------	------	------	--
FIRE CONTROL EQUIPMENT - -	500	300	------	------	------	--
GUIDED MISSILES - - - - - -	2,100	1,400	------	------	------	--
GUNS - - - - - - - - - - -	100	------	------	------	------	--
ORDNANCE SERVICES - - - - -	100	------	------	------	------	--
SMALL ARMS - - - - - - - -	100	------	------	------	------	--
TANKS - - - - - - - - - - -	100	100	------	------	------	--
OTHER - - - - - - - - - - -	800	300	------	100	------	--
PETROLEUM - - - - - - -	16,100	14,100	700	100	------	--
THIS FIELD GENERALLY -- - -	6,000	5,000	400	------	------	--
ASPHALT MATERIALS - - - - -	100	100	------	------	------	--
CRUDE PETROLEUM - - - - - -	1,700	1,700	------	------	------	--
GAS PIPELINES - - - - - - -	400	400	------	------	------	--
LIQUIFIED GAS - - - - - - -	100	100	------	------	------	--
LUBRICATING OIL AND GREASE	200	200	------	------	------	--
NATURAL GAS - - - - - - - -	600	500	------	------	------	--
OILFIELD SERVICES - - - - -	1,400	1,300	100	------	------	--
OIL PIPELINES - - - - - - -	300	300	------	------	------	--
REFINERY PRODUCTS - - - - -	1,500	1,500	------	------	------	--
RESERVOIRS (OIL AND GAS) -	2,400	2,100	100	------	------	--
OTHER - - - - - - - - - - -	1,200	1,000	100	------	------	--
RAILWAY, RAPID TRANSIT -	1,700	1,300	------	------	------	--
THIS FIELD GENERALLY - - -	500	300	------	------	------	--
RAILROAD EQUIPMENT - - - -	600	500	------	------	------	--
RAILROAD TRANSPORTATION - -	200	200	------	------	------	--
RAILWAY SERVICES - - - - - -	------	------	------	------	------	--
RAPID TRANSIT - - - - - - -	200	200	------	------	------	--
OTHER - - - - - - - - - - -	100	------	------	------	------	--
UTILITIES - - - - - - -	15,200	11,400	300	------	------	--
THIS FIELD GENERALLY - - -	1,100	600	100	------	------	--
ELECTRIC UTILITIES - - - -	8,900	7,000	100	------	------	--
ELECTRIC AND GAS UTILITIES	2,800	2,500	------	------	------	--
GAS UTILITIES - - - - - - -	800	600	------	------	------	--
SANITARY SERVICES - - - - -	100	100	------	------	------	--
SEWERAGE,WASTE DISPOSAL SER	500	200	------	------	------	--
WATER SUPPLY AND TREATMENT	800	200	------	------	------	--
OTHER - - - - - - - - - - -	300	200	------	------	------	--

OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

	TOTAL	PRIVATE INDUSTRY OR BUSINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
TINUED													
-	5,200	2,800	------	100	------	------	200	1,700	300	------	------	100	100
-	1,200	500	------	------	------	------	------	500	100	------	------	------	------
-	300	100	------	------	------	------	------	100	------	------	------	------	------
-	500	300	------	------	------	------	------	100	------	------	------	------	------
-	2,100	1,400	------	------	------	------	------	500	100	------	------	------	------
-	100	------	------	------	------	------	------	100	------	------	------	------	------
-	100	------	------	------	------	------	------	100	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------	------	------
-	100	100	------	------	------	------	------	100	------	------	------	------	------
-	800	300	------	100	------	------	100	300	------	------	------	------	------
-	16,100	14,100	700	100	------	------	100	200	------	100	------	100	600
-	6,000	5,000	400	------	------	------	------	100	------	------	------	------	400
-	100	100	------	------	------	------	------	------	------	------	------	------	------
-	1,700	1,700	------	------	------	------	------	------	------	------	------	------	------
-	400	400	------	------	------	------	------	------	------	------	------	------	------
-	100	100	------	------	------	------	------	------	------	------	------	------	------
E	200	200	------	------	------	------	------	------	------	------	------	------	------
-	600	500	------	------	------	------	------	------	------	------	------	------	------
-	1,400	1,300	100	------	------	------	------	------	------	------	------	------	------
-	300	300	------	------	------	------	------	------	------	------	------	------	------
-	1,500	1,500	------	------	------	------	------	------	------	------	------	------	------
-	2,400	2,100	100	------	------	------	------	100	------	------	------	------	100
-	1,200	1,000	100	------	------	------	------	------	------	------	------	------	------
-	1,700	1,300	------	------	------	------	------	------	------	------	100	------	100
-	500	300	------	------	------	------	------	------	------	------	------	------	100
-	600	500	------	------	------	------	------	------	------	------	------	------	------
-	200	200	------	------	------	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------	------	------	------	------	------
-	200	200	------	------	------	------	------	------	------	------	------	------	------
-	100	------	------	------	------	------	------	------	------	------	------	------	------
-	15,200	11,400	300	------	------	------	100	600	------	200	1,000	1,100	500
-	1,100	600	100	------	------	------	------	100	------	100	100	------	100
-	8,900	7,000	100	------	------	------	100	300	------	------	400	600	400
S	2,800	2,500	------	------	------	------	------	------	------	------	100	200	100
-	800	600	------	------	------	------	------	------	------	------	------	100	------
-	100	100	------	------	------	------	------	------	------	------	------	------	------
ER	500	200	------	------	------	------	------	------	------	------	100	------	------
T	800	200	------	------	------	------	------	100	------	100	300	------	------
-	300	200	------	------	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLO

PRODUCTS OR SERVICES	TOTAL	TYPES OF EMPLOYER: PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPH MIL TAR SERV
PRODUCTS OR SERVICES, CONTINUED									
OTHER PRODUCTS, SERVICES	11,800	8,000	500	400	------	------	700	800	2
ADVERTISING AND PROMOTION -	200	100	------	------	------	------	------	------	----
BANKING AND FINANCE - - - -	300	300	------	------	------	------	------	------	----
BUILDING MAINTENANCE - - -	200	100	------	------	------	------	------	------	----
BUSINESS FORMS - - - - - - -	------	------	------	------	------	------	------	------	----
CLOTHING - - - - - - - - - -	100	100	------	------	------	------	------	------	----
INSURANCE - - - - - - - - - -	600	500	------	------	------	------	100	------	----
LABORATORY SERVICES - - - -	500	400	------	------	------	------	------	------	----
LEATHER - - - - - - - - - - -	------	------	------	------	------	------	------	------	----
LUMBER - - - - - - - - - - -	------	------	------	------	------	------	------	------	----
PAPER - - - - - - - - - - - -	600	500	------	------	------	------	------	------	----
PAPER PRODUCTS - - - - - - -	400	400	------	------	------	------	------	------	----
PATENTS AND LEGAL SERVICES	400	200	100	------	------	------	------	------	----
PERSONNEL SERVICES - - - -	300	200	------	------	------	------	------	------	----
PRINTING, RELATED SERVICES	300	300	------	------	------	------	------	------	----
PULP - - - - - - - - - - - -	200	200	------	------	------	------	------	------	----
REGULATORY SERVICES - - - -	400	------	------	------	------	------	------	100	----
RETAIL TRADE SERVICES - - -	100	100	------	------	------	------	------	------	----
RUBBER, FABRICATED PRODUCTS	400	400	------	------	------	------	------	------	----
TEXTILES, TEXTILE PRODUCTS	600	600	------	------	------	------	------	------	----
TIRES - - - - - - - - - - - -	100	100	------	------	------	------	------	------	----
TOYS AND AMUSEMENTS - - - -	------	------	------	------	------	------	------	------	----
WHOLESALE TRADE SERVICES -	100	100	------	------	------	------	------	------	----
WOOD PRODUCTS - - - - - - -	300	200	------	------	------	------	------	------	----
OTHER PRODUCT - - - - - - -	1,600	1,300	------	------	------	------	100	100	----
OTHER SERVICE - - - - - - -	3,800	1,800	300	200	------	------	300	500	2
NO REPORT - - - - - - - -	1,200	700	------	100	------	------	------	100	----

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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MEETING CRITERIA BY PRODUCTS OR SERVICES AND TYPES OF EMPLOYER--CONTINUED

TYPES OF EMPLOYER

PRIVATE NDUSTRY OR USINESS	SELF-EM-PLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILI-TARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
8,000	500	400	------	------	700	800	200	300	100	300	400
100	------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
500	------	------	------	------	100	------	------	------	------	------	------
400	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
500	------	------	------	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	100	------	200	100	------	------
100	------	------	------	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	------	------	------
1,300	------	------	------	------	100	100	------	------	------	------	------
1,800	300	200	------	------	300	500	200	100	100	100	200
700	------	100	------	------	------	100	------	------	------	------	200

AUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSON

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AN

AREAS OF TE

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLURGICAL
ALL PRODUCTS OR SERVICES	308,000	1,600	4,100	11,700	12,100
AGRICULTURE AND FOOD - -	4,200	200	100	100	------
THIS FIELD GENERALLY - - -	800	------	------	------	------
AGRICULTURAL SERVICES - - -	600	------	------	------	------
ANIMALS - - - - - - - - - -	100	------	------	------	------
DISTILLED PRODUCTS - - - -	100	------	------	------	------
FISH PRODUCTS - - - - - - - -	------	------	------	------	------
FORESTRY - - - - - - - - -	100	------	------	------	------
FOOD AND BEVERAGE PRODUCTS	1,400	------	------	------	------
NATURAL FIBERS - - - - - -	100	------	------	------	------
PLANTS - - - - - - - - - -	100	------	------	------	------
TOBACCO - - - - - - - - - -	100	------	------	------	------
OTHER - - - - - - - - - - -	700	------	------	------	------
AIRCRAFT AND SPACE - - -	33,800	200	100	1,100	600
THIS FIELD GENERALLY - - -	6,100	------	------	200	100
AERONAUTICS - - - - - - - -	2,400	------	------	------	------
AIRCRAFT - - - - - - - - -	4,900	------	------	100	100
AIRCRAFT V/STOL - - - - - -	800	------	------	------	------
AIRCRAFT ENGINES - - - - -	2,800	------	------	200	200
AIRCRAFT PARTS, ACCESSORIES	1,900	------	------	100	100
AIRCRAFT SERVICES - - - - -	200	------	------	------	------
AIRLINES - - - - - - - - -	400	------	------	------	------
ASTRONAUTICS - - - - - - - -	2,000	------	------	------	------
LAUNCH VEHICLES - - - - - -	2,100	------	------	------	------
RE-ENTRY DEVICES - - - - -	1,500	------	------	100	------
SPACECRAFT - - - - - - - - -	3,800	------	------	100	------
SPACECRAFT ENGINES - - - -	1,300	------	------	100	------
SPACECRAFT PARTS, ACCESS. -	700	------	------	------	------
SPACECRAFT SERVICES - - - -	300	------	------	------	------
OTHER - - - - - - - - - - - -	2,500	------	----	------	------
CERAMICS - - - - - - - - -	2,200	------	------	400	100
THIS FIELD GENERALLY - - -	200	------	------	100	------
ABRASIVES - - - - - - - - -	100	------	------	------	------
CEMENT,CONCRETE,GYPSUM PROD	500	------	------	------	------
CLAY PRODUCTS - - - - - - -	100	------	------	------	------
GLASS PRODUCTS - - - - - -	600	------	------	100	------
INSULATION MATERIALS - - -	100	------	------	------	------
REFRACTORIES - - - - - - -	300	------	------	100	100
RELATED SERVICES - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - -	200	------	------	100	------

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OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY

		AREAS OF TECHNOLOGY						
TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
,000	1,600	4,100	11,700	12,100	9,900	33,700	42,800	40,100
,200	200	100	100	------	100	800	100	400
800	------	------	------	------	------	200	------	100
600	------	------	------	------	------	300	------	------
100	------	------	------	------	------	100	------	------
100	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
,400	------	------	------	------	------	------	------	100
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	100
700	------	------	------	------	------	200	------	100
,800	200	100	1,100	600	200	2,100	2,300	9,900
,100	------	------	200	100	------	400	400	1,600
,400	------	------	------	------	------	100	100	1,300
,900	------	------	100	100	------	600	300	1,300
800	------	------	------	------	------	100	------	300
,800	------	------	200	200	------	------	------	1,100
,900	------	------	100	100	------	100	300	400
200	------	------	------	------	------	------	------	100
400	------	------	------	------	------	100	------	------
,000	------	------	------	------	------	100	100	600
100	------	------	------	------	------	100	100	600
,500	------	------	100	------	------	------	100	500
,800	------	------	100	------	------	300	400	500
,300	------	------	100	------	------	------	------	700
700	------	------	------	------	------	------	100	200
300	------	------	------	------	------	------	------	------
500	------	------	------	------	100	100	300	500
200	------	------	400	100	100	300	100	200
200	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------
500	------	------	------	------	------	200	------	------
100	------	------	------	------	------	------	------	------
600	------	------	100	------	------	------	------	100
100	------	------	------	------	------	------	------	------
300	------	------	100	100	------	------	------	------
---	------	------	------	------	------	------	------	------
200	------	------	100	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY: HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFO… MATH…
ALL PRODUCTS OR SERVICES	8,500	2,600	32,100	12,400	56,500	1
AGRICULTURE AND FOOD	------	------	700	100	1,100	-
THIS FIELD GENERALLY	------	------	100	------	100	-
AGRICULTURAL SERVICES	------	------	100	------	------	-
ANIMALS	------	------	------	------	------	-
DISTILLED PRODUCTS	------	------	------	------	------	-
FISH PRODUCTS	------	------	------	------	------	-
FORESTRY	------	------	------	------	------	-
FOOD AND BEVERAGE PRODUCTS	------	------	300	------	700	-
NATURAL FIBERS	------	------	------	------	------	-
PLANTS	------	------	------	------	------	-
TOBACCO	------	------	------	------	------	-
OTHER	------	------	100	------	100	-
AIRCRAFT AND SPACE	1,600	100	2,000	2,300	7,600	
THIS FIELD GENERALLY	300	------	500	300	1,500	
AERONAUTICS	100	------	100	100	400	
AIRCRAFT	100	------	500	200	1,000	
AIRCRAFT V/STOL	------	------	------	100	200	-
AIRCRAFT ENGINES	100	------	100	200	400	
AIRCRAFT PARTS, ACCESSORIES	------	------	100	300	500	
AIRCRAFT SERVICES	------	------	------	------	100	-
AIRLINES	------	------	------	------	100	-
ASTRONAUTICS	100	------	100	200	500	
LAUNCH VEHICLES	100	------	200	200	600	
RE-ENTRY DEVICES	200	------	100	100	300	
SPACECRAFT	300	------	200	400	1,200	
SPACECRAFT ENGINES	100	------	------	100	100	-
SPACECRAFT PARTS, ACCESS.	100	------	------	100	200	-
SPACECRAFT SERVICES	------	------	------	------	100	-
OTHER	200	------	100	200	600	
CERAMICS	100	------	200	100	500	-
THIS FIELD GENERALLY	------	------	------	------	------	-
ABRASIVES	------	------	------	------	------	-
CEMENT, CONCRETE, GYPSUM PROD	------	------	------	------	200	-
CLAY PRODUCTS	------	------	------	------	------	-
GLASS PRODUCTS	------	------	------	------	200	-
INSULATION MATERIALS	------	------	------	------	------	-
REFRACTORIES	------	------	------	------	------	-
RELATED SERVICES	------	------	------	------	------	-
OTHER	------	------	------	------	------	-

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY

HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
8,500	2,600	32,100	12,400	56,500	11,500	9,700	18,700
------	------	700	100	1,100	------	300	300
------	------	100	------	100	------	100	100
------	------	100	------	------	------	------	100
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	300	------	700	------	100	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	100	------	100	------	------	------
1,600	100	2,000	2,300	7,600	1,400	1,300	1,200
300	------	500	300	1,500	200	300	300
100	------	100	100	400	100	100	100
100	------	500	200	1,000	300	300	100
------	------	------	100	200	------	------	100
100	------	100	200	400	100	------	100
------	------	100	300	500	100	------	------
------	------	------	------	100	------	------	------
------	------	------	------	100	------	------	------
100	------	100	200	500	100	100	100
100	------	200	200	600	100	100	100
200	------	100	100	300	100	------	------
300	------	200	400	1,200	100	100	100
100	------	------	100	100	------	------	------
100	------	------	100	200	------	------	------
------	------	------	------	100	------	------	------
200	------	100	200	600	100	200	100
100	------	200	100	500	------	100	100
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	200	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	200	------	------	------
------	------	------	------	------	------	------	------
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NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES

AR

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS
PRODUCTS OR SERVICES, CONTINUED				
CHEMICALS, ALLIED PROD.	20,300	100	400	4,000
THIS FIELD GENERALLY - - -	4,300	------	100	1,000
AGRICULTURAL CHEMICALS - -	500	------	------	100
CARBON PRODUCTS - - - - - -	500	------	------	100
CHEMICAL SERVICES - - - - -	100	------	------	100
COSMETICS - - - - - - - - -	100	------	------	------
DRUGS AND PHARMACEUTICALS -	800	------	------	100
DYES AND ORGANIC PIGMENTS -	100	------	------	------
ELASTOMERS - - - - - - - -	200	------	------	100
EXPLOSIVES - - - - - - - -	300	------	------	------
FERMENTATION PRODUCTS - - -	100	------	------	------
FERTILIZER - - - - - - - -	300	------	------	100
GASES - - - - - - - - - - -	400	------	------	------
INDUSTRIAL CHEMICALS - - -	1,900	------	100	400
INORGANICS - - - - - - - -	500	------	------	100
NUCLEAR,RADIOACT. MATERIALS	1,000	------	------	100
ORGANICS - - - - - - - - -	1,000	------	------	200
PAINTS AND COATINGS - - - -	300	------	------	200
PETROCHEMICALS - - - - - -	2,200	------	100	400
PHOTOGRAPHIC CHEMICALS - -	200	------	------	------
PLASTICS,SYNTHETIC POLYMERS	2,700	------	------	500
PROPELLANTS - - - - - - - -	300	------	------	100
SOAP AND DETERGENTS - - - -	400	------	------	100
SYNTHETIC FIBERS - - - - -	1,000	------	------	200
OTHER - - - - - - - - - - -	1,100	------	------	300
COMMUNICATIONS - - - - -	8,100	------	100	100
THIS FIELD GENERALLY - - -	2,600	------	------	------
BROADCASTING - - - - - - -	500	------	------	------
CABLE TELEVISION - - - - -	100	------	------	------
COMMUNICATION SERVICES - -	1,100	------	------	------
MOTION PICTURES - - - - - -	------	------	------	------
TELEGRAPH - - - - - - - - -	100	------	------	------
TELEPHONE - - - - - - - - -	2,800	------	100	------
OTHER - - - - - - - - - - -	800	------	------	------

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UMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

ICES	TOTAL	AREAS OF TECHNOLOGY							
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLURGICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRONMENTAL AND STRUCTURAL	ELECTROMAGNETIC	DYNAMICS AND MECHANICS
S, CONTINUED									
) PROD.	20,300	100	400	4,000	200	100	400	300	1,400
Y - - -	4,300	------	100	1,000	------	------	100	100	200
ALS - -	500	------	------	100	------	------	------	------	------
- - - -	500	------	------	100	------	------	------	------	------
- - - -	100	------	------	100	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------
TICALS -	800	------	------	100	------	------	------	------	------
GMENTS -	100	------	------	------	------	------	------	------	------
- - - -	200	------	------	100	------	------	------	------	------
- - - -	300	------	------	------	------	------	------	------	100
TS - - -	100	------	------	------	------	------	------	------	------
- - - -	300	------	------	100	------	------	------	------	------
- - - -	400	------	------	------	------	------	------	------	------
S - - -	1,900	------	100	400	------	------	------	------	100
- - - -	500	------	------	100	------	------	------	------	------
ATERIALS	1,000	------	------	100	------	------	------	------	100
- - - -	1,000	------	------	200	------	------	------	------	------
- - - -	300	------	------	200	------	------	------	------	------
- - - -	2,200	------	100	400	------	------	------	------	100
ALS - -	200	------	------	------	------	------	------	------	------
POLYMERS	2,700	------	------	500	------	------	------	------	200
- - - -	300	------	------	100	------	------	------	------	100
- - - -	400	------	------	100	------	------	------	------	------
- - - -	1,000	------	------	200	------	------	------	------	200
- - - -	1,100	------	------	300	------	------	------	------	100
- - - -	8,100	------	100	100	------	------	------	5,200	100
Y - - -	2,600	------	------	------	------	------	------	1,700	------
- - - -	500	------	------	------	------	------	------	400	------
- - - -	100	------	------	------	------	------	------	------	------
CES - -	1,100	------	------	------	------	------	------	800	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	100	------
- - - -	2,800	------	100	------	------	------	------	1,700	100
- - - -	800	------	------	------	------	------	------	500	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSO

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND ARE

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY				
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION
PRODUCTS OR SERVICES, CONTINUED					
CHEMICALS, ALLIED PROD.	600	300	3,900	800	5,600
THIS FIELD GENERALLY - - -	100	------	800	200	800
AGRICULTURAL CHEMICALS - -	------	------	200	------	100
CARBON PRODUCTS - - - - - - -	------	------	100	------	100
CHEMICAL SERVICES - - - - - -	------	------	------	------	------
COSMETICS - - - - - - - - - -	------	------	------	------	100
DRUGS AND PHARMACEUTICALS -	------	------	100	------	400
DYES AND ORGANIC PIGMENTS -	------	------	------	------	100
ELASTOMERS - - - - - - - - -	------	------	100	------	100
EXPLOSIVES - - - - - - - - -	------	------	------	------	100
FERMENTATION PRODUCTS - - -	------	------	------	------	------
FERTILIZER - - - - - - - - -	------	------	100	------	100
GASES - - - - - - - - - - - -	200	------	------	------	100
INDUSTRIAL CHEMICALS - - -	------	------	300	100	700
INORGANICS - - - - - - - - -	------	------	100	------	100
NUCLEAR,RADIOACT. MATERIALS	------	300	100	100	200
ORGANICS - - - - - - - - - -	------	------	300	------	300
PAINTS AND COATINGS - - - -	------	------	------	------	100
PETROCHEMICALS - - - - - - -	------	------	600	100	500
PHOTOGRAPHIC CHEMICALS - -	100	------	------	------	100
PLASTICS,SYNTHETIC POLYMERS	------	------	600	100	900
PROPELLANTS - - - - - - - - -	------	------	------	------	------
SOAP AND DETERGENTS - - - -	------	------	100	------	200
SYNTHETIC FIBERS - - - - - -	------	------	200	------	400
OTHER - - - - - - - - - - - -	100	------	100	------	200
COMMUNICATIONS - - - - - -	100	------	300	100	1,300
THIS FIELD GENERALLY - - -	------	------	100	------	400
BROADCASTING - - - - - - - -	------	------	------	------	------
CABLE TELEVISION - - - - - -	------	------	------	------	------
COMMUNICATION SERVICES - -	------	------	------	------	100
MOTION PICTURES - - - - - - -	------	------	------	------	------
TELEGRAPH - - - - - - - - - -	------	------	------	------	------
TELEPHONE - - - - - - - - - -	------	------	100	------	500
OTHER - - - - - - - - - - - -	------	------	------	------	200

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RS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

	AREAS OF TECHNOLOGY						
, AND ED CS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
0	300	3,900	800	5,600	300	1,000	1,100
0	------	800	200	800	100	200	500
-	------	200	------	100	------	------	------
-	------	100	------	100	------	------	------
-	------	------	------	------	------	------	------
-	------	------	------	100	------	------	------
-	------	100	------	400	------	------	------
-	------	------	------	100	------	------	------
-	------	100	------	100	------	------	------
-	------	------	------	100	------	------	------
-	------	------	------	------	------	------	------
-	------	100	------	100	------	------	------
0	------	------	------	100	------	------	------
-	------	300	100	700	------	100	100
-	------	100	------	100	------	100	------
-	300	100	100	200	------	------	------
-	------	300	------	300	------	------	------
-	------	------	------	100	------	------	------
-	------	600	100	500	------	100	100
0	------	------	------	100	------	------	------
-	------	600	100	900	------	200	100
-	------	------	------	------	------	------	------
-	------	100	------	200	------	------	------
-	------	200	------	400	------	100	------
C	------	100	------	200	------	100	100
0	------	300	100	1,300	200	200	400
-	------	100	------	400	100	100	100
-	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------
-	------	------	------	100	------	------	100
-	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------
-	------	100	------	500	100	------	200
-	------	------	------	200	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES

AR

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS
PRODUCTS OR SERVICES, CONTINUED				
COMPUTERS - - - - - - -	11,100	------	------	100
THIS FIELD GENERALLY - - -	4,000	------	------	------
ANALOG EQUIPMENT - - - - -	200	------	------	------
COMPONENTS AND PARTS - - -	400	------	------	------
COMPUTER SERVICES - - - - -	1,000	------	------	------
DIGITAL EQUIPMENT - - - - -	1,900	------	------	------
HYBRID EQUIPMENT - - - - -	200	------	------	------
MEMORY UNITS - - - - - - -	300	------	------	------
OPTICAL EQUIPMENT - - - - -	100	------	------	------
PERIPHERAL EQUIPMENT - - -	1,100	------	------	------
SOFTWARE - - - - - - - - -	1,400	------	------	------
OTHER - - - - - - - - - - -	500	------	------	------
CONSTRUCTION,CIVIL ENGR.	49,200	100	200	500
THIS FIELD GENERALLY - - -	10,600	------	100	------
AIRPORTS AND FACILITIES - -	700	------	------	------
ARCHITECTURE - - - - - - -	600	------	------	------
BRIDGES - - - - - - - - - -	2,200	------	------	------
BUILDINGS AND STRUCTURES -	8,100	------	100	100
CHEMICAL PLANTS, FACILITIES	1,700	------	------	100
CITY,REGION.,URBAN PLANNING	700	------	------	------
CONSTRUCTION SERVICES - - -	900	------	------	------
DAMS, WATER CONTROL STRUCT.	2,600	------	------	------
EXCAVATION AND FOUNDATION -	700	------	------	------
HEAVY CONSTRUCTION - - - -	1,100	------	------	------
HIGHWAYS - - - - - - - - -	5,200	------	------	100
HYDRO-ELECTRIC FACILITIES -	500	------	------	------
INDUST. PLANTS, FACILITIES	2,100	------	------	------
LANDSCAPING - - - - - - - -	------	------	------	------
MILITARY CONSTRUCTION - - -	1,200	------	------	------
PREFABRICATED CONSTRUCTION	300	------	------	------
PUBLIC WORKS - - - - - - -	2,700	------	------	------
RECREATIONAL FACILITIES - -	100	------	------	------
RIVERS AND HARBORS - - - -	500	------	------	------
SANITARY FACILITIES - - - -	1,900	------	------	------
SPACECRAFT,MISSILE FACILIT.	200	------	------	------
SURVEYING AND MAPPING - - -	700	------	------	------
THIN-SHELL CONSTRUCTION - -	100	------	------	------
TUNNELING - - - - - - - - -	200	------	------	------
WATER SUPPLY AND TREATMENT	1,400	------	------	------
OTHER - - - - - - - - - - -	2,200	------	------	------

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F ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

	TOTAL	AREAS OF TECHNOLOGY							
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR- GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON- MENTAL AND STRUCTURAL	ELECTRO- MAGNETIC	DYNAMICS AND MECHANICS
INUED									
-	11,100	------	------	100	100	100	100	1,700	300
-	4,000	------	------	------	------	------	------	400	------
-	200	------	------	------	------	------	------	------	------
-	400	------	------	------	------	------	------	100	------
-	1,000	------	------	------	------	------	------	------	------
-	1,900	------	------	------	------	------	------	500	------
-	200	------	------	------	------	------	------	------	------
-	300	------	------	------	------	------	------	200	------
-	100	------	------	------	------	------	------	------	------
-	1,100	------	------	------	------	------	------	300	100
-	1,400	------	------	------	------	------	------	------	------
-	500	------	------	------	------	------	------	------	------
.	49,200	100	200	500	100	1,500	20,400	900	3,000
-	10,600	------	100	------	------	200	3,200	300	500
-	700	------	------	------	------	------	300	------	------
-	600	------	------	------	------	------	200	------	100
-	2,200	------	------	------	------	------	1,300	------	------
-	8,100	------	100	100	------	------	4,400	100	500
S	1,700	------	------	100	------	------	200	------	100
G	700	------	------	------	------	------	300	------	------
-	900	------	------	------	------	------	300	------	100
.	2,600	------	------	------	------	300	1,200	------	400
-	700	------	------	------	------	100	400	------	------
-	1,100	------	------	------	------	------	400	------	------
-	5,200	------	------	100	------	------	2,400	------	100
-	500	------	------	------	------	------	100	100	100
	2,100	------	------	------	------	------	400	100	200
-	------	------	------	------	------	------	------	------	------
-	1,200	------	------	------	------	------	200	------	100
	300	------	------	------	------	------	200	------	------
-	2,700	------	------	------	------	100	900	------	200
-	100	------	------	------	------	------	100	------	------
-	500	------	------	------	------	------	100	------	100
-	1,900	------	------	------	------	------	1,500	------	------
.	200	------	------	------	------	------	100	------	------
-	700	------	------	------	------	------	500	------	------
-	100	------	------	------	------	------	------	------	------
-	200	------	------	------	------	100	------	------	------
	1,400	------	------	------	------	100	800	------	100
-	2,200	------	------	------	------	300	800	100	200

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERS

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AR

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION
PRODUCTS OR SERVICES, CONTINUED					
COMPUTERS - - - - - - - -	100	------	300	500	2,300
THIS FIELD GENERALLY - - -	------	------	100	200	900
ANALOG EQUIPMENT - - - - -	------	------	------	------	------
COMPONENTS AND PARTS - - -	------	------	------	------	200
COMPUTER SERVICES - - - - -	------	------	------	------	100
DIGITAL EQUIPMENT - - - - -	------	------	------	100	300
HYBRID EQUIPMENT - - - - -	------	------	------	------	------
MEMORY UNITS - - - - - - -	------	------	------	------	------
OPTICAL EQUIPMENT - - - - -	------	------	------	------	------
PERIPHERAL EQUIPMENT - - -	------	------	------	------	200
SOFTWARE - - - - - - - - - -	------	------	------	100	300
OTHER - - - - - - - - - - - -	------	------	------	------	200
CONSTRUCTION,CIVIL ENGR.	200	100	10,000	500	5,300
THIS FIELD GENERALLY - - -	------	------	3,000	100	1,000
AIRPORTS AND FACILITIES - -	------	------	200	------	100
ARCHITECTURE - - - - - - - -	------	------	100	------	100
BRIDGES - - - - - - - - - - -	------	------	400	------	100
BUILDINGS AND STRUCTURES -	100	------	1,100	------	700
CHEMICAL PLANTS, FACILITIES	------	------	400	100	600
CITY,REGION.,URBAN PLANNING	------	------	100	------	100
CONSTRUCTION SERVICES - - -	------	------	200	------	200
DAMS, WATER CONTROL STRUCT.	------	------	300	------	100
EXCAVATION AND FOUNDATION -	------	------	100	------	------
HEAVY CONSTRUCTION - - - -	------	------	200	------	200
HIGHWAYS - - - - - - - - - -	------	------	1,500	100	400
HYDRO-ELECTRIC FACILITIES -	------	------	100	------	------
INDUST. PLANTS, FACILITIES	------	------	400	------	800
LANDSCAPING - - - - - - - - -	------	------	------	------	------
MILITARY CONSTRUCTION - - -	------	------	500	------	200
PREFABRICATED CONSTRUCTION	------	------	------	------	100
PUBLIC WORKS - - - - - - - -	------	------	900	------	300
RECREATIONAL FACILITIES - -	------	------	100	------	------
RIVERS AND HARBORS - - - -	------	------	100	------	------
SANITARY FACILITIES - - - -	------	------	100	------	------
SPACECRAFT,MISSILE FACILIT.	------	------	------	------	100
SURVEYING AND MAPPING - - -	------	------	100	------	------
THIN-SHELL CONSTRUCTION - -	------	------	------	------	------
TUNNELING - - - - - - - - - -	------	------	------	------	------
WATER SUPPLY AND TREATMENT	------	------	100	------	100
OTHER - - - - - - - - - - - -	------	------	200	------	200

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ER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY

ES	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
CONTINUED								
- - -	100	------	300	500	2,300	5,100	200	300
- - -	------	------	100	200	900	2,000	100	100
- - -	------	------	------	------	------	------	------	------
- - -	------	------	------	------	200	------	------	------
- - -	------	------	------	------	100	700	------	------
- - -	------	------	------	100	300	800	------	------
- - -	------	------	------	------	------	100	------	------
- - -	------	------	------	------	------	100	------	------
- - -	------	------	------	------	------	------	------	------
- - -	------	------	------	------	200	200	------	------
- - -	------	------	------	100	300	900	------	------
- - -	------	------	------	------	200	200	------	------
ENGR.	200	100	10,000	500	5,300	700	1,400	4,200
- - -	------	------	3,000	100	1,000	100	400	1,500
S - -	------	------	200	------	100	------	------	------
- - -	------	------	100	------	100	100	------	100
- - -	------	------	400	------	100	100	------	200
ES -	100	------	1,100	------	700	200	200	600
ITIES	------	------	400	100	600	------	------	100
NNING	------	------	100	------	100	------	100	100
- - -	------	------	200	------	200	------	------	100
RUCT.	------	------	300	------	100	------	100	100
ION -	------	------	100	------	------	------	------	------
- - -	------	------	200	------	200	------	------	100
- - -	------	------	1,500	100	400	100	200	400
IES -	------	------	100	------	------	------	------	100
TIES	------	------	400	------	800	------	------	100
- - -	------	------	------	------	------	------	------	------
- - -	------	------	500	------	200	------	------	100
TION	------	------	------	------	100	------	------	------
- - -	------	------	900	------	300	------	100	200
S - -	------	------	100	------	------	------	------	------
- - -	------	------	100	------	------	------	------	------
- - -	------	------	100	------	------	------	------	100
ILIT.	------	------	------	------	100	------	------	------
- - -	------	------	100	------	------	------	------	100
N - -	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------
MENT	------	------	100	------	100	------	------	100
- - -	------	------	200	------	200	------	100	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES A

AREA

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS
PRODUCTS OR SERVICES, CONTINUED				
EDUC., INFORMATION SERV.	15,400	100	1,600	500
THIS FIELD GENERALLY - - -	2,500	------	400	100
ENGINEERING INSTRUCTION - -	10,400	100	800	400
INFORMATION SERVICES - - -	400	------	------	------
LIBRARIES - - - - - - - - -	------	------	------	------
TECHNICAL INSTRUCTION - - -	1,200	------	300	------
OTHER - - - - - - - - - - -	900	------	100	------
ELECTRICAL EQUIP., SERV.	20,400	------	------	400
THIS FIELD GENERALLY - - -	4,100	------	------	100
BUSINESS, OFFICE EQUIPMENT	600	------	------	------
COMPONENTS AND ACCESSORIES	800	------	------	------
CONTROLS - - - - - - - - -	1,500	------	------	------
ELECTRICAL SERVICES - - - -	400	------	------	------
HOUSEHOLD APPLIANCES - - -	600	------	------	------
INDUSTRIAL ELEC. EQUIPMENT	2,800	------	------	------
INSTRUMENTS, TEST EQUIPMENT	1,300	------	------	------
INSULATED CONDUCTORS - - -	400	------	------	------
LIGHTING AND WIRING - - - -	500	------	------	------
MAGNETIC DEVICES - - - - -	300	------	------	------
POWER GENERATION - - - - -	2,200	------	------	100
RURAL ELECTRIFICATION - - -	200	------	------	------
STORAGE BATTERIES - - - - -	100	------	------	100
SWITCHGEAR - - - - - - - -	600	------	------	------
TELEPHONE EQUIPMENT - - - -	600	------	------	------
TRANSFORMERS - - - - - - -	900	------	------	------
TRANSMISSION, DISTRIBUTION	1,700	------	------	------
WELDING APPARATUS - - - - -	200	------	------	------
OTHER - - - - - - - - - - -	800	------	------	------

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ER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

ES	TOTAL	AREAS OF TECHNOLOGY							
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
CONTINUED									
SERV.	15,400	100	1,600	500	500	400	1,600	1,300	3,200
- - -	2,500	------	400	100	100	100	200	100	200
N - -	10,400	100	800	400	300	200	1,300	1,000	2,800
- - -	400	------	------	------	------	------	------	------	------
- - -	------	------	------	------	------	------	------	------	------
- - -	1,200	------	300	------	100	------	100	100	100
- - -	900	------	100	------	------	------	100	------	------
SERV.	20,400	------	------	400	300	------	200	10,500	1,100
- - -	4,100	------	------	100	------	------	------	2,600	100
PMENT	600	------	------	------	------	------	------	200	100
RIES	800	------	------	------	------	------	------	400	100
- - -	1,500	------	------	------	------	------	------	500	------
- - -	400	------	------	------	------	------	------	300	------
- - -	600	------	------	------	------	------	------	100	100
PMENT	2,800	------	------	------	------	------	------	1,800	100
IPMENT	1,300	------	------	------	------	------	------	300	------
- - -	400	------	------	------	------	------	------	300	------
- - -	500	------	------	------	------	------	------	200	------
- - -	300	------	------	------	------	------	------	200	------
- - -	2,200	------	------	100	------	------	------	800	400
- - -	200	------	------	------	------	------	------	100	------
- - -	100	------	------	100	------	------	------	------	------
- - -	600	------	------	------	------	------	------	400	------
- - -	600	------	------	------	------	------	------	200	------
- - -	900	------	------	------	------	------	------	500	------
UTION	1,700	------	------	------	------	------	------	1,300	------
- - -	200	------	------	------	100	------	------	------	------
- - -	800	------	------	------	------	------	------	400	100

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND ARE

PRODUCTS OR SERVICES	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION
	AREAS OF TECHNOLOGY				
PRODUCTS OR SERVICES, CONTINUED					
EDUC., INFORMATION SERV.	800	200	1,000	300	1,200
THIS FIELD GENERALLY - - -	100	100	200	------	300
ENGINEERING INSTRUCTION - -	600	100	600	200	700
INFORMATION SERVICES - - -	------	------	------	------	100
LIBRARIES - - - - - - - - -	------	------	------	------	------
TECHNICAL INSTRUCTION - - -	------	------	100	------	100
OTHER - - - - - - - - - - -	------	------	100	------	200
ELECTRICAL EQUIP., SERV.	400	300	600	1,700	2,800
THIS FIELD GENERALLY - - -	------	------	100	200	200
BUSINESS, OFFICE EQUIPMENT	------	------	------	------	200
COMPONENTS AND ACCESSORIES	------	------	------	------	200
CONTROLS - - - - - - - - -	------	------	------	500	200
ELECTRICAL SERVICES - - - -	------	------	------	------	------
HOUSEHOLD APPLIANCES - - -	------	------	100	------	300
INDUSTRIAL ELEC. EQUIPMENT	------	------	100	200	400
INSTRUMENTS, TEST EQUIPMENT	------	------	------	600	100
INSULATED CONDUCTORS - - -	------	------	------	------	100
LIGHTING AND WIRING - - - -	200	------	------	------	100
MAGNETIC DEVICES - - - - -	------	------	------	------	------
POWER GENERATION - - - - -	------	300	100	100	200
RURAL ELECTRIFICATION - - -	------	------	------	------	------
STORAGE BATTERIES - - - - -	------	------	------	------	------
SWITCHGEAR - - - - - - - -	------	------	------	------	100
TELEPHONE EQUIPMENT - - - -	------	------	------	------	200
TRANSFORMERS - - - - - - -	------	------	------	------	200
TRANSMISSION, DISTRIBUTION	------	------	------	------	100
WELDING APPARATUS - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - -	------	------	------	------	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY

	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
NTINUED								
RV.	800	200	1,000	300	1,200	1,000	500	1,100
- -	100	100	200	------	300	100	200	200
- -	600	100	600	200	700	500	200	600
- -	------	------	------	------	100	100	------	------
- -	------	------	------	------	------	------	------	------
- -	------	------	100	------	100	100	------	100
- -	------	------	100	------	200	100	100	100
RV.	400	300	600	1,700	2,800	200	300	1,500
- -	------	------	100	200	200	------	100	700
NT	------	------	------	------	200	------	------	------
ES	------	------	------	------	200	------	------	------
- -	------	------	------	500	200	------	------	------
- -	------	------	------	------	------	------	------	------
- -	------	------	100	------	300	------	------	------
NT	------	------	100	200	400	------	------	100
ENT	------	------	------	600	100	------	------	100
- -	------	------	------	------	100	------	------	------
- -	200	------	------	------	100	------	------	------
- -	------	------	------	------	------	------	------	------
- -	------	300	100	100	200	------	------	100
- -	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------
- -	------	------	------	------	100	------	------	------
- -	------	------	------	------	200	------	------	------
- -	------	------	------	------	200	------	------	100
ON	------	------	------	------	100	------	------	100
- -	------	------	------	------	------	------	------	------
- -	------	------	------	------	100	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AN

AREAS

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	META GI
PRODUCTS OR SERVICES, CONTINUED					
ELECTRONIC EQUIP., SERV.	23,500	100	100	200	
THIS FIELD GENERALLY - - -	5,500	------	------	------	--
ANTENNAS - - - - - - - - -	700	------	------	------	--
AUDIO - - - - - - - - - - -	200	------	------	------	--
COMPONENTS AND ACCESSORIES	900	------	------	------	--
CONTROLS - - - - - - - - -	1,000	------	------	------	--
ELECTROACOUSTIC TRANSDUCERS	------	------	------	------	--
ELECTRO-OPTICAL DEVICES - -	900	------	------	------	--
ELECTRON TUBES - - - - - -	800	------	------	------	--
ELECTRONIC EQUIP. GENERALLY	3,300	------	------	------	--
ELECTRONIC SERVICES - - - -	200	------	------	------	--
INSTRUMENTS, TEST EQUIPMENT	2,700	------	------	------	--
INTEGRATED CIRCUITS - - - -	700	------	------	------	--
LASERS - - - - - - - - - -	200	------	------	------	--
MICROWAVE AND RADAR - - - -	2,600	------	------	------	--
RADIO AND TV RECEIVERS - -	400	------	------	------	--
RADIO AND TV TRANSMITTERS -	100	------	------	------	--
RECORDING - - - - - - - - -	200	------	------	------	--
SEMICONDUCTOR DEVICES - - -	1,000	------	------	------	--
SONAR - - - - - - - - - - -	600	------	------	------	--
SONIC, ULTRASONIC DEVICES -	100	------	------	------	--
THERMO-ELECTRIC DEVICES - -	100	------	------	------	--
X-RAY - - - - - - - - - - -	100	------	------	------	--
OTHER - - - - - - - - - - -	1,200	------	------	------	--
LAB-SCI-PHOTO-OPT EQUIP.	2,900	100	------	100	--
THIS FIELD GENERALLY - - -	700	------	------	------	--
LAB., SCIENTIFIC APPARATUS	500	------	------	------	--
MEASURING,CONTROL INSTRUM.	800	------	------	------	--
OPTICAL INSTRUMENTS, LENSES	200	------	------	------	--
PHOTOGRAPHIC EQUIPMENT - -	300	------	------	------	--
TEMPERATURE MEASUREMENT - -	200	------	------	------	--
TIMING DEVICES - - - - - -	------	------	------	------	--
OTHER - - - - - - - - - - -	200	------	------	------	--

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ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

TOTAL	AREAS OF TECHNOLOGY							
	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
NUED								
23,500	100	100	200	100	200	100	10,000	800
5,500	------	------	------	------	100	------	2,800	100
700	------	------	------	------	------	------	400	------
200	------	------	------	------	------	------	------	------
900	------	------	------	------	------	------	400	------
1,000	------	------	------	------	------	------	200	------
------	------	------	------	------	------	------	------	------
900	------	------	------	------	------	------	400	------
800	------	------	------	------	------	------	300	100
3,300	------	------	------	------	------	------	1,600	100
200	------	------	------	------	------	------	100	------
2,700	------	------	------	------	------	------	800	100
700	------	------	------	------	------	------	300	------
200	------	------	------	------	------	------	100	------
2,600	------	------	------	------	------	------	1,400	100
400	------	------	------	------	------	------	200	------
100	------	------	------	------	------	------	100	------
200	------	------	------	------	------	------	100	------
1,000	------	------	------	------	------	------	200	------
600	------	------	------	------	100	------	100	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
1,200	------	------	------	------	------	------	400	100
2,900	100	------	100	------	100	100	200	300
700	------	------	------	------	------	------	------	100
500	------	------	------	------	------	------	100	100
800	------	------	------	------	------	------	100	100
200	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY				
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION
PRODUCTS OR SERVICES, CONTINUED					
ELECTRONIC EQUIP., SERV.	1,300	100	1,300	2,400	4,900
THIS FIELD GENERALLY - - -	100	------	400	300	1,200
ANTENNAS - - - - - - - - - -	------	------	100	------	------
AUDIO - - - - - - - - - - - -	100	------	------	------	------
COMPONENTS AND ACCESSORIES	------	------	------	------	300
CONTROLS - - - - - - - - - -	------	------	------	400	200
ELECTROACOUSTIC TRANSDUCERS	------	------	------	------	------
ELECTRO-OPTICAL DEVICES - -	100	------	------	------	100
ELECTRON TUBES - - - - - -	------	------	100	------	200
ELECTRONIC EQUIP. GENERALLY	100	------	200	200	700
ELECTRONIC SERVICES - - - -	------	------	------	------	------
INSTRUMENTS, TEST EQUIPMENT	100	------	100	1,100	300
INTEGRATED CIRCUITS - - - -	100	------	------	------	100
LASERS - - - - - - - - - - -	100	------	------	------	------
MICROWAVE AND RADAR - - - -	100	------	200	100	600
RADIO AND TV RECEIVERS - -	------	------	------	------	100
RADIO AND TV TRANSMITTERS -	------	------	------	------	------
RECORDING - - - - - - - - -	------	------	------	------	------
SEMICONDUCTOR DEVICES - - -	300	------	------	------	300
SONAR - - - - - - - - - - -	200	------	------	------	200
SONIC, ULTRASONIC DEVICES -	------	------	------	------	------
THERMO-ELECTRIC DEVICES - -	------	------	------	------	------
X-RAY - - - - - - - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - - -	------	------	------	100	300
LAB-SCI-PHOTO-OPT EQUIP.	400	------	100	900	400
THIS FIELD GENERALLY - - -	100	------	------	200	100
LAB., SCIENTIFIC APPARATUS	------	------	------	100	------
MEASURING,CONTROL INSTRUM.	------	------	------	500	------
OPTICAL INSTRUMENTS, LENSES	100	------	------	------	------
PHOTOGRAPHIC EQUIPMENT - -	100	------	------	------	100
TEMPERATURE MEASUREMENT - -	------	------	------	100	------
TIMING DEVICES - - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - - -	------	------	------	------	100

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EERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AT, T AND LIED SICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
			AREAS OF TECHNOLOGY				
300	100	1,300	2,400	4,900	700	400	700
100	------	400	300	1,200	100	100	300
---	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------
---	------	------	------	300	------	------	------
---	------	------	400	200	------	------	------
---	------	------	------	------	------	------	------
100	------	------	------	100	100	------	------
---	------	100	------	200	------	------	------
100	------	200	200	700	100	------	100
---	------	------	------	------	------	------	------
100	------	100	1,100	300	100	------	100
100	------	------	------	100	------	------	------
100	------	------	------	------	------	------	------
100	------	200	100	600	------	100	------
---	------	------	------	100	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
300	------	------	------	300	------	------	------
200	------	------	------	200	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
---	------	------	100	300	100	100	------
400	------	100	900	400	100	100	100
100	------	------	200	100	------	------	------
---	------	------	100	------	------	------	------
---	------	------	500	------	------	------	------
100	------	------	------	------	------	------	------
100	------	------	------	100	------	------	------
---	------	------	100	------	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	100	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND

AREAS O

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALL GICA
PRODUCTS OR SERVICES, CONTINUED					
MACHINERY, MECH. EQUIP.	30,100	100	100	1,100	5
THIS FIELD GENERALLY - - -	5,100	------	------	100	----
AIR COMPRESSORS, BLOWERS -	900	------	------	100	----
AIR CONDITICNING, HEATING	8,300	------	------	200	----
BEARINGS - - - - - - - - - -	500	------	------	------	1
CONSTRUCTICN ECUIPMENT - -	600	------	------	------	----
DIES, JIQS, PATTERNS - - -	100	------	------	------	----
DISTILLING EQUIPMENT - - -	100	------	------	------	----
FARM MACHINERY - - - - - - -	1,400	------	------	------	----
FOOD MACHINERY - - - - - - -	200	------	------	------	----
FURNACES, HEATING EQUIPMENT	900	------	------	100	1
GEARS - - - - - - - - - - - -	100	------	------	------	----
HYDRAULIC MACHINERY - - - -	400	------	------	------	----
INDUSTRIAL MACHINERY,EQUIP.	1,400	------	------	100	----
INTERNAL COMBUSTION ENGINES	500	------	------	------	----
MACHINE TOCLS, ACCESSORIES	700	------	------	------	----
MATERIALS HANDLING MACH. -	800	------	------	------	----
MINING MACHINERY - - - - - -	300	------	------	------	----
NUCLEAR MACHINERY - - - - - -	1,200	------	------	------	----
PAPER MACHINERY - - - - - - -	300	------	------	------	----
PNEUMATIC EQUIPMENT - - - -	300	------	------	------	----
POWER TRANSMISSICN EQUIP.	300	------	------	------	----
PRINTING, DUPLICATING MACH.	200	------	------	------	----
PUMPS,LIQUID HANCLING EQUIP	1,200	------	------	100	----
REFRIGERATING ECUIPMENT - -	700	------	------	------	----
SPECIALIZEC INDUSTRIAL MACH	1,000	------	------	------	----
STEAM ENGINES - - - - - - - -	100	------	------	------	----
TEXTILE MACHINERY - - - - - -	200	------	------	------	----
TURBINES - - - - - - - - - -	800	------	------	------	----
VENDING, SERVICE MACHINERY	------	------	------	------	----
OTHER - - - - - - - - - - - - -	1,500	------	------	------	----

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

OTAL	AREAS OF TECHNOLOGY							
	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
,100	100	100	1,100	500	200	2,700	700	11,200
,100	------	------	100	------	------	100	100	2,300
900	------	------	100	------	------	------	------	400
,300	------	------	200	------	------	2,100	100	3,100
500	------	------	------	100	------	------	------	300
600	------	------	------	------	------	------	------	100
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
,400	------	------	------	------	------	------	------	400
200	------	------	------	------	------	------	------	100
900	------	------	100	100	------	------	100	200
100	------	------	------	------	------	------	------	100
400	------	------	------	------	------	------	------	300
,400	------	------	100	------	------	------	100	500
500	------	------	------	------	------	------	------	300
700	------	------	------	------	------	------	100	200
800	------	------	------	------	------	------	------	200
300	------	------	------	------	------	------	------	------
,200	------	------	------	------	------	------	------	300
300	------	------	------	------	------	------	------	100
300	------	------	------	------	------	------	------	100
300	------	------	------	------	------	------	------	200
200	------	------	------	------	------	------	------	100
,200	------	------	100	------	------	100	------	500
700	------	------	------	------	------	100	------	200
000	------	------	------	------	------	------	100	300
100	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	100
800	------	------	------	------	------	------	------	400
---	------	------	------	------	------	------	------	------
,500	------	------	------	------	------	100	------	500

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF T

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY					
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORM AN MATHEM
PRODUCTS OR SERVICES, CONTINUED						
MACHINERY, MECH. EQUIP.	1,500	600	2,300	800	5,300	
THIS FIELD GENERALLY - - -	200	------	400	100	800	---
AIR COMPRESSORS, BLOWERS -	------	------	100	------	100	---
AIR CONDITIONING, HEATING	600	------	400	200	800	---
BEARINGS - - - - - - - - - -	------	------	------	------	100	---
CONSTRUCTION EQUIPMENT - -	------	------	100	------	200	---
DIES, JIGS, PATTERNS - - -	------	------	------	------	------	---
DISTILLING EQUIPMENT - - -	------	------	------	------	------	---
FARM MACHINERY - - - - - -	------	------	200	------	600	---
FOOD MACHINERY - - - - - -	------	------	------	------	100	---
FURNACES, HEATING EQUIPMENT	100	------	100	------	100	---
GEARS - - - - - - - - - - -	------	------	------	------	------	---
HYDRAULIC MACHINERY - - - -	------	------	------	------	------	---
INDUSTRIAL MACHINERY,EQUIP.	------	------	100	100	400	---
INTERNAL COMBUSTION ENGINES	------	------	------	------	100	---
MACHINE TOOLS, ACCESSORIES	------	------	100	------	300	---
MATERIALS HANDLING MACH. -	------	------	300	------	100	---
MINING MACHINERY - - - - -	------	------	100	------	100	---
NUCLEAR MACHINERY - - - - -	100	500	------	------	100	
PAPER MACHINERY - - - - - -	------	------	------	------	100	---
PNEUMATIC EQUIPMENT - - - -	------	------	------	100	100	---
POWER TRANSMISSION EQUIP.	------	------	------	------	------	---
PRINTING, DUPLICATING MACH.	------	------	------	------	100	---
PUMPS,LIQUID HANDLING EQUIP	------	------	------	------	200	---
REFRIGERATING EQUIPMENT - -	100	------	------	------	200	---
SPECIALIZED INDUSTRIAL MACH	100	------	100	100	200	---
STEAM ENGINES - - - - - - -	------	------	------	------	------	---
TEXTILE MACHINERY - - - - -	------	------	------	------	------	---
TURBINES - - - - - - - - -	100	------	------	------	100	---
VENDING, SERVICE MACHINERY	------	------	------	------	------	---
OTHER - - - - - - - - - - - -	100	------	100	100	300	---

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EERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY							
AT., T AND LIED SICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
500	600	2,300	800	5,300	400	700	2,200
200	------	400	100	800	------	100	800
---	------	100	------	100	------	------	100
600	------	400	200	800	------	200	500
---	------	------	------	100	------	------	------
---	------	100	------	200	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
---	------	200	------	600	------	------	100
---	------	------	------	100	------	------	------
100	------	100	------	100	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
---	------	100	100	400	------	100	100
---	------	------	------	100	------	------	------
---	------	100	------	300	------	------	100
---	------	300	------	100	------	------	------
---	------	100	------	100	------	------	------
100	500	------	------	100	100	------	------
---	------	------	------	100	------	------	------
---	------	------	100	100	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	100	------	------	------
---	------	------	------	200	------	------	100
100	------	------	------	200	------	------	100
100	------	100	100	200	------	------	------
---	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------
100	------	------	------	100	------	------	------
---	------	------	------	------	------	------	------
100	------	100	100	300	------	------	100

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TE

PRODUCTS OR SERVICES	TOTAL	AREAS OF TECHNOLOG				
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR- GICAL	EART ATMOSPH AN MAR
PRODUCTS OR SERVICES, CONTINUED						
MARINE TRANSPORTATION -	5,000	------	------	------	100	[illegible]
THIS FIELD GENERALLY - - -	700	------	------	------	------	[illegible]
BOATS AND SMALL CRAFT - - -	200	------	------	------	------	---
INLAND WATERWAY CRAFT, SERV.	------	------	------	------	------	---
MARINE AUXILIARIES - - - -	100	------	------	------	------	---
MARINE ENGINES - - - - - -	100	------	------	------	------	
MERCHANT SHIPS - - - - - -	300	------	------	------	------	
NAVAL ARCHITECTURAL SER. -	700	------	------	------	------	
NAVAL VESSELS - - - - - -	1,000	------	------	------	------	---
OCEAN TRANSPORTATION - - -	200	------	------	------	------	---
PORT FACILITIES, SERVICES	100	------	------	------	------	---
PROPELLERS AND SHAFTING -	------	------	------	------	------	
SHIPBUILDING, REPAIR SERVICE	800	------	------	------	------	
UNDERWATER CRAFT - - - - -	400	------	------	------	------	---
OTHER - - - - - - - - - - -	300	------	------	------	------	
MEDICAL, HEALTH SERVICES	1,300	400	------	------	------	---
THIS FIELD GENERALLY - - -	400	100	------	------	------	---
ARTIFICIAL ORGANS - - - -	100	------	------	------	------	---
MEDICAL AND HEALTH CARE - -	200	100	------	------	------	---
MEDICAL, DENTAL INSTRUMENTS	200	100	------	------	------	---
MEDICAL LABORATORY SERVICES	------	------	------	------	------	---
PROSTHETIC DEVICES - - - -	------	------	------	------	------	---
OTHER - - - - - - - - - - -	400	100	------	------	------	
METALS, BASIC - - - - -	13,500	------	100	1,100	7,300	
THIS FIELD GENERALLY - - -	2,600	------	------	300	1,400	---
ALUMINUM - - - - - - - - -	1,300	------	------	100	400	---
COPPER - - - - - - - - - -	500	------	------	------	300	---
ELECTROMETALLURGICAL PROD.	200	------	------	------	100	---
FOUNDRIES - - - - - - - - -	600	------	------	------	300	---
IRON-STEEL MILLS, FOUNDRIES	3,900	------	------	200	1,800	---
LEAD AND ZINC - - - - - - -	300	------	------	------	100	---
METALLURGICAL PRODUCTS - -	800	------	------	100	600	---
METALLURGICAL SERVICES - -	1,100	------	------	100	800	---
NON-FERROUS SMELTING - - -	800	------	------	------	500	---
NON-FERROUS CASTINGS - - -	200	------	------	------	100	---
RADIOACTIVE METALS - - - -	100	------	------	------	100	---
RARE METALS - - - - - - - -	------	------	------	------	------	---
REFRACTORY METALS - - - - -	300	------	------	------	200	---
OTHER - - - - - - - - - - -	900	------	------	100	600	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

OTAL	AREAS OF TECHNOLOGY							
	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
,000	------	------	------	100	900	600	300	800
700	------	------	------	------	200	100	------	100
200	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
300	------	------	------	------	100	------	------	100
700	------	------	------	------	200	100	------	100
,000	------	------	------	------	100	100	100	200
200	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------
800	------	------	------	------	100	100	100	100
400	------	------	------	------	100	------	------	100
300	------	------	------	------	------	------	------	------
,300	400	------	------	------	------	100	------	100
400	100	------	------	------	------	100	------	------
100	------	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------
200	100	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------
----	------	------	------	------	------	------	------	------
400	100	------	------	------	------	100	------	------
,500	------	100	1,100	7,300	100	100	200	500
,600	------	------	300	1,400	------	------	------	100
,300	------	------	100	400	------	------	100	100
500	------	------	------	300	------	------	------	------
200	------	------	------	100	------	------	------	------
600	------	------	------	300	------	------	------	------
,500	------	------	200	1,800	------	100	100	200
300	------	------	------	100	------	------	------	------
800	------	------	100	600	------	------	------	------
,100	------	------	100	800	------	------	------	------
800	------	------	------	500	------	------	------	------
200	------	------	------	100	------	------	------	------
100	------	------	------	100	------	------	------	------
----	------	------	------	------	------	------	------	------
300	------	------	------	200	------	------	------	------
900	------	------	100	600	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFO… MATH…
PRODUCTS OR SERVICES, CONTINUED						
MARINE TRANSPORTATION -	100	100	500	100	900	
THIS FIELD GENERALLY - - -	------	------	100	------	100	-
BOATS AND SMALL CRAFT - - -	------	------	------	------	------	-
INLAND WATERWAY CRAFT, SERV.	------	------	------	------	------	-
MARINE AUXILIARIES - - - -	------	------	------	------	------	-
MARINE ENGINES - - - - - -	------	------	------	------	------	-
MERCHANT SHIPS - - - - - -	------	------	------	------	100	-
NAVAL ARCHITECTURAL SER. -	------	------	100	------	100	-
NAVAL VESSELS - - - - - -	------	------	100	------	200	-
OCEAN TRANSPORTATION - - -	------	------	------	------	------	-
PORT FACILITIES, SERVICES	------	------	------	------	------	-
PROPELLERS AND SHAFTING -	------	------	------	------	------	-
SHIPBUILDING, REPAIR SERVICE	------	------	100	------	200	-
UNDERWATER CRAFT - - - - -	------	------	------	------	100	-
OTHER - - - - - - - - - -	------	------	------	------	100	-
MEDICAL, HEALTH SERVICES	------	------	------	100	300	
THIS FIELD GENERALLY - - -	------	------	------	------	100	-
ARTIFICIAL ORGANS - - - -	------	------	------	------	------	-
MEDICAL AND HEALTH CARE - -	------	------	------	------	100	-
MEDICAL, DENTAL INSTRUMENTS	------	------	------	------	------	-
MEDICAL LABORATORY SERVICES	------	------	------	------	------	-
PROSTHETIC DEVICES - - - -	------	------	------	------	------	-
OTHER - - - - - - - - - - -	------	------	------	------	100	-
METALS, BASIC - - - - -	100	------	600	200	2,000	
THIS FIELD GENERALLY - - -	100	------	100	------	100	-
ALUMINUM - - - - - - - - -	------	------	100	------	400	-
COPPER - - - - - - - - - -	------	------	------	------	------	-
ELECTROMETALLURGICAL PROD.	------	------	------	------	------	-
FOUNDRIES - - - - - - - - -	------	------	------	------	100	-
IRON-STEEL MILLS, FOUNDRIES	------	------	200	100	1,000	-
LEAD AND ZINC - - - - - - -	------	------	------	------	------	-
METALLURGICAL PRODUCTS - -	------	------	------	------	100	-
METALLURGICAL SERVICES - -	------	------	------	------	------	-
NON-FERROUS SMELTING - - -	------	------	------	------	100	-
NON-FERROUS CASTINGS - - -	------	------	------	------	------	-
RADIOACTIVE METALS - - - -	------	------	------	------	------	-
RARE METALS - - - - - - - -	------	------	------	------	------	-
REFRACTORY METALS - - - - -	------	------	------	------	------	-
OTHER - - - - - - - - - - -	------	------	------	------	100	-

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OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

	AREAS OF TECHNOLOGY							
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
TINUED								
-	100	100	500	100	900	100	200	300
-	------	------	100	------	100	------	------	------
-	------	------	------	------	------	------	------	------
V.	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
-	------	------	100	------	100	------	------	100
-	------	------	100	------	200	------	------	------
-	------	------	------	------	------	------	------	------
	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
CE	------	------	100	------	200	------	100	------
-	------	------	------	------	100	------	------	------
-	------	------	------	------	100	------	------	------
ES	------	------	------	100	300	------	------	100
-	------	------	------	------	100	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
TS	------	------	------	------	------	------	------	------
ES	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
-	100	------	600	200	2,000	100	100	1,000
-	100	------	100	------	100	------	------	400
-	------	------	100	------	400	------	------	100
-	------	------	------	------	------	------	------	------
.	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
ES	------	------	200	100	1,000	------	100	200
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
-	------	------	------	------	------	------	------	100
-	------	------	------	------	100	------	------	100
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL P…

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND …

PRODUCTS OR SERVICES	TOTAL	AREAS …			
		BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METAL… GIC…
PRODUCTS OR SERVICES, CONTINUED					
METAL FABRICATED PROD.	6,500	------	------	500	9
THIS FIELD GENERALLY - - -	1,400	------	------	100	2
BOILERS - - - - - - - - - - -	500	------	------	------	----
CANS AND CONTAINERS - - - -	100	------	------	------	----
ELECTROPLATED, COATED PROD.	200	------	------	100	----
HARDWARE - - - - - - - - - -	100	------	------	------	----
MACHINED OR TURNED PRODUCTS	300	------	------	------	----
METAL FABRICATION SERVICES	400	------	------	------	----
PIPE, FITTINGS, VALVES - -	700	------	------	------	1
PRESSURE VESSELS - - - - -	600	------	------	------	----
SHEET METAL PRODUCTS - - -	300	------	------	------	----
STAMPINGS - - - - - - - - -	200	------	------	------	----
STRUCTURAL STEEL PRODUCTS	400	------	------	------	----
WELDMENTS - - - - - - - - -	200	------	------	------	1
WIRE PRODUCTS - - - - - - -	300	------	------	------	1
OTHER - - - - - - - - - - -	700	------	------	------	1
MINING - - - - - - - - - -	6,600	------	100	100	8
THIS FIELD GENERALLY - - -	2,000	------	------	------	2
COAL - - - - - - - - - - -	800	------	------	------	----
IRON ORES - - - - - - - - -	600	------	------	------	2
MINING SERVICES - - - - - -	300	------	------	------	----
NON-FERROUS METAL ORES - -	1,400	------	------	------	2
NON-METALLIC MINERALS - - -	500	------	------	------	1
QUARRY PRODUCTS - - - - - -	200	------	------	------	----
SULFUR - - - - - - - - - -	100	------	------	------	----
URANIUM, RADIOACTIVE ORES	300	------	------	------	----
OTHER - - - - - - - - - - -	300	------	------	------	----
MOTOR VEHICLE TRANS. - -	2,600	------	------	100	2
THIS FIELD GENERALLY - - -	500	------	------	------	----
AUTOMOBILES - - - - - - - -	800	------	------	100	1
BUSES, TRUCKS, TRAILERS - -	300	------	------	------	----
ENGINES - - - - - - - - - -	200	------	------	------	----
MOTORCYCLES, ETC. - - - - -	------	------	------	------	----
MOTOR TRANSPORTATION SERV.	------	------	------	------	----
PARTS AND ACCESSORIES - - -	600	------	------	------	----
OTHER - - - - - - - - - - -	200	------	------	------	----

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

		AREAS OF TECHNOLOGY						
TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
NUED								
6,500	------	------	500	900	------	400	100	900
1,400	------	------	100	200	------	100	------	200
500	------	------	------	------	------	------	------	100
100	------	------	------	------	------	------	------	------
200	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	100
400	------	------	------	------	------	------	------	------
700	------	------	------	100	------	------	------	200
600	------	------	------	------	------	------	------	100
300	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------
400	------	------	------	------	------	300	------	------
200	------	------	------	100	------	------	------	------
300	------	------	------	100	------	------	------	------
700	------	------	------	100	------	------	------	100
6,600	------	100	100	800	3,600	200	100	100
2,000	------	------	------	200	1,000	100	------	------
800	------	------	------	------	500	------	------	------
600	------	------	------	200	200	------	------	------
300	------	------	------	------	200	------	------	------
1,400	------	------	------	200	900	------	------	------
500	------	------	------	100	300	------	------	------
200	------	------	------	------	100	------	------	------
100	------	------	------	------	------	------	------	------
300	------	------	------	------	200	------	------	------
300	------	------	------	------	200	------	------	------
2,600	------	------	100	200	------	300	100	500
500	------	------	------	------	------	200	------	100
800	------	------	100	100	------	------	------	100
300	------	------	------	------	------	------	------	100
200	------	------	------	------	------	------	------	100
------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	------	100
200	------	------	------	------	------	100	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AN

PRODUCTS OR SERVICES	AREAS OF TECHNOL HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTCMATION AND CONTROL	WO MAN MENT EVALU
PRODUCTS OR SERVICES, CONTINUED					
METAL FABRICATED PROD.	300	------	700	100	2,
THIS FIELD GENERALLY - - -	------	------	100	------	
BOILERS - - - - - - - - - - -	100	------	------	------	
CANS AND CCNTAINERS - - - -	------	------	------	------	
ELECTROPLATED, CCATED PROD.	------	------	------	------	---
HARDWARE - - - - - - - - - -	------	------	------	------	
MACHINED OR TURNEC PRODUCTS	------	------	------	------	
METAL FABRICATICN SERVICES	------	------	100	------	
PIPE, FITTINGS, VALVES - -	------	------	100	------	
PRESSURE VESSELS - - - - -	100	------	100	------	
SHEET METAL PROCUCTS - - -	------	------	------	------	
STAMPINGS - - - - - - - - -	------	------	------	------	
STRUCTURAL STEEL PRCDUCTS	------	------	------	------	---
WELDMENTS - - - - - - - - -	------	------	------	------	---
WIRE PRODUCTS - - - - - - -	------	------	------	------	
OTHER - - - - - - - - - - - -	100	------	100	------	
MINING - - - - - - - - - -	------	------	300	------	
THIS FIELD GENERALLY - - -	------	------	100	------	
COAL - - - - - - - - - - - -	------	------	100	------	
IRON ORES - - - - - - - - - -	------	------	------	------	
MINING SERVICES - - - - - -	------	------	------	------	---
NON-FERROUS METAL CRES - -	------	------	------	------	
NON-METALLIC MINERALS - - -	------	------	------	------	
QUARRY PRODUCTS - - - - - -	------	------	------	------	---
SULFUR - - - - - - - - - - -	------	------	------	------	---
URANIUM, RADIOACTIVE ORES	------	------	------	------	---
OTHER - - - - - - - - - - - -	------	------	------	------	---
MOTOR VEHICLE TRANS. - -	------	------	200	100	
THIS FIELD GENERALLY - - -	------	------	------	------	
AUTOMOBILES - - - - - - - -	------	------	100	------	
BUSES, TRUCKS, TRAILERS - -	------	------	------	------	
ENGINES - - - - - - - - - - -	------	------	------	------	
MOTORCYCLES, ETC. - - - - -	------	------	------	------	---
MOTOR TRANSPORTATION SERV.	------	------	------	------	---
PARTS ANC ACCESSORIES - - -	------	------	------	------	
OTHER - - - - - - - - - - - -	------	------	------	------	---

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

INEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY

HEAT, GHT AND PPLIED HYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
300	------	700	100	2,000	100	100	300
------	------	100	------	400	------	------	100
100	------	------	------	100	------	------	------
------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	100	------	------	------
------	------	------	------	200	------	------	------
------	------	100	------	200	------	------	------
------	------	100	------	200	------	------	------
100	------	100	------	100	100	------	------
------	------	------	------	200	------	------	------
------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	100	------	------	------
100	------	100	------	200	------	------	------
------	------	300	------	500	------	100	700
------	------	100	------	100	------	------	400
------	------	100	------	100	------	------	100
------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	100
------	------	------	------	100	------	------	100
------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	200	100	900	100	------	100
------	------	------	------	100	------	------	------
------	------	100	------	200	------	------	100
------	------	------	------	100	------	------	------
------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------
------	------	-----	------	300	------	------	------
------	------	------	------	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVIC

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS
PRODUCTS OR SERVICES, CONTINUED				
ORDNANCE - - - - - - - -	5,200	------	------	100
THIS FIELD GENERALLY - - -	1,2CC	------	------	100
AMMUNITION - - - - - - - -	300	------	------	------
FIRE CONTROL EQUIPMENT - -	500	------	------	------
GUIDED MISSILES - - - - - -	2,1CC	------	------	------
GUNS - - - - - - - - - - -	100	------	------	------
ORDNANCE SERVICES - - - - -	100	------	------	------
SMALL ARMS - - - - - - - -	100	------	------	------
TANKS - - - - - - - - - -	100	------	------	------
OTHER - - - - - - - - - - -	800	------	------	------
PETROLEUM - - - - - - -	16,100	------	700	500
THIS FIELD GENERALLY -- - -	6,000	------	300	200
ASPHALT MATERIALS - - - - -	100	------	------	------
CRUDE PETROLEUM - - - - - -	1,700	------	100	------
GAS PIPELINES - - - - - - -	400	------	------	------
LIQUIFIED GAS - - - - - - -	100	------	------	------
LUBRICATING OIL AND GREASE	200	------	------	------
NATURAL GAS - - - - - - - -	600	------	------	------
OILFIELD SERVICES - - - - -	1,400	------	------	100
OIL PIPELINES - - - - - - -	300	------	------	------
REFINERY PRODUCTS - - - - -	1,500	------	100	100
RESERVOIRS (OIL AND GAS) -	2,400	------	100	------
OTHER - - - - - - - - - - -	1,200	------	100	------
RAILWAY, RAPID TRANSIT -	1,700	------	------	------
THIS FIELD GENERALLY - - -	500	------	------	------
RAILROAD EQUIPMENT - - - -	6CC	------	------	------
RAILROAD TRANSPORTATION - -	200	------	------	------
RAILWAY SERVICES - - - - -	------	------	------	------
RAPID TRANSIT - - - - - - -	2CC	------	------	------
OTHER - - - - - - - - - - -	100	------	------	------
UTILITIES - - - - - - -	15,20C	------	200	300
THIS FIELD GENERALLY - - -	1,100	------	100	------
ELECTRIC UTILITIES - - - -	8,900	------	100	100
ELECTRIC AND GAS UTILITIES	2,80C	------	100	100
GAS UTILITIES - - - - - - -	800	------	------	100
SANITARY SERVICES - - - - -	100	------	------	------
SEWERAGE,WASTE DISPOSAL SER	50C	------	------	------
WATER SUPPLY AND TREATMENT	80C	------	------	------
OTHER - - - - - - - - - - -	300	------	------	------

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INEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

TOTAL	AREAS OF TECHNOLOGY							
	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR-GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON-MENTAL AND STRUCTURAL	ELECTRO-MAGNETIC	DYNAMICS AND MECHANICS
5,200	------	------	100	100	100	100	500	1,100
1,200	------	------	100	------	------	------	100	300
300	------	------	------	------	------	------	------	100
500	------	------	------	------	------	------	100	------
2,100	------	------	------	------	------	------	200	400
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
800	------	------	------	------	------	------	100	200
16,100	------	700	500	100	1,800	400	300	1,300
6,000	------	300	200	------	600	100	100	200
100	------	------	------	------	------	------	------	------
1,700	------	100	------	------	200	------	------	100
400	------	------	------	------	------	------	------	100
100	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	100
600	------	------	------	------	100	------	------	100
1,400	------	------	100	------	200	------	100	200
300	------	------	------	------	------	------	------	100
1,500	------	100	100	------	------	100	------	100
2,400	------	100	------	------	500	------	------	200
1,200	------	100	------	------	200	------	------	100
1,700	------	------	------	------	------	400	100	200
500	------	------	------	------	------	200	------	------
600	------	------	------	------	------	100	------	200
200	------	------	------	------	------	100	------	------
------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	100	------	------
100	------	------	------	------	------	------	------	------
15,200	------	200	300	------	100	1,500	7,100	1,800
1,100	------	100	------	------	------	100	200	200
8,900	------	100	100	------	------	300	5,300	1,000
2,800	------	100	100	------	------	100	1,400	300
800	------	------	100	------	------	------	100	200
100	------	------	------	------	------	100	------	------
500	------	------	------	------	------	400	------	------
800	------	------	------	------	100	500	------	------
300	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONN

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS

PRODUCTS OR SERVICES	AREAS OF TECHNOLOGY: HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	I… MA…
PRODUCTS OR SERVICES, CONTINUED						
ORDNANCE - - - - - - - - -	100	------	500	300	2,000	
THIS FIELD GENERALLY - - -	------	------	100	------	500	
AMMUNITION - - - - - - - - -	------	------	------	------	100	
FIRE CONTROL EQUIPMENT - -	------	------	------	100	200	
GUIDED MISSILES - - - - - - -	100	------	100	200	900	
GUNS - - - - - - - - - - - -	------	------	------	------	------	
ORDNANCE SERVICES - - - - -	------	------	------	------	100	
SMALL ARMS - - - - - - - - -	------	------	------	------	------	
TANKS - - - - - - - - - - - -	------	------	------	------	------	
OTHER - - - - - - - - - - - -	------	------	100	------	200	
PETROLEUM - - - - - - - -	200	------	5,000	400	3,200	
THIS FIELD GENERALLY -- - -	100	------	2,000	100	1,200	
ASPHALT MATERIALS - - - - - -	------	------	------	------	------	
CRUDE PETROLEUM - - - - - - -	------	------	500	------	600	
GAS PIPELINES - - - - - - - -	------	------	100	------	100	
LIQUIFIED GAS - - - - - - - -	------	------	------	------	------	
LUBRICATING OIL AND GREASE	------	------	------	------	------	
NATURAL GAS - - - - - - - - -	------	------	100	------	200	
OILFIELD SERVICES - - - - - -	------	------	400	------	200	
OIL PIPELINES - - - - - - - -	------	------	------	------	100	
REFINERY PRODUCTS - - - - - -	------	------	800	100	200	
RESERVOIRS (OIL AND GAS) -	------	------	700	------	400	
OTHER - - - - - - - - - - - -	------	------	300	------	200	
RAILWAY, RAPID TRANSIT -	------	------	100	100	400	
THIS FIELD GENERALLY - - -	------	------	------	------	100	
RAILROAD EQUIPMENT - - - -	------	------	------	------	100	
RAILROAD TRANSPORTATION - -	------	------	------	------	100	
RAILWAY SERVICES - - - - -	------	------	------	------	------	
RAPID TRANSIT - - - - - - - -	------	------	------	------	------	
OTHER - - - - - - - - - - - -	------	------	------	------	------	
UTILITIES - - - - - - - -	100	300	700	400	1,400	
THIS FIELD GENERALLY - - -	------	------	100	------	200	
ELECTRIC UTILITIES - - - -	------	200	300	200	600	
ELECTRIC AND GAS UTILITIES	------	------	200	100	400	
GAS UTILITIES - - - - - - - -	------	------	100	------	100	
SANITARY SERVICES - - - - -	------	------	------	------	------	
SEWERAGE,WASTE DISPOSAL SER	------	------	------	------	------	
WATER SUPPLY AND TREATMENT	------	------	------	------	------	
OTHER - - - - - - - - - - - -	------	------	------	------	------	

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INEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

AREAS OF TECHNOLOGY							
HEAT, GHT AND PPLIED HYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
100	------	500	300	2,000	100	200	100
-----	------	100	------	500	------	------	------
-----	------	------	------	100	------	------	------
-----	------	------	100	200	------	------	------
100	------	100	200	900	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	100	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
-----	------	100	------	200	------	------	------
200	------	5,000	400	3,200	400	1,000	900
100	------	2,000	100	1,200	100	400	500
-----	------	------	------	------	------	------	------
-----	------	500	------	600	------	100	100
-----	------	100	------	100	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
-----	------	100	------	200	------	------	------
-----	------	400	------	200	------	100	------
-----	------	------	------	100	------	------	------
-----	------	800	100	200	100	------	------
-----	------	700	------	400	100	300	100
-----	------	300	------	200	------	100	100
-----	------	100	100	400	100	------	200
-----	------	------	------	100	------	------	100
-----	------	------	------	100	------	------	------
-----	------	------	------	100	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
100	300	700	400	1,400	200	400	700
-----	------	100	------	200	------	------	100
-----	200	300	200	600	100	200	500
-----	------	200	100	400	100	100	100
-----	------	100	------	100	------	100	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------
-----	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND T

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SE

PRODUCTS OR SERVICES	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICA AND MATERIA
PRODUCTS OR SERVICES, CONTINUED				
OTHER PRODUCTS, SERVICES	11,800	100	300	500
ADVERTISING AND PROMOTION -	200	------	------	------
BANKING AND FINANCE - - - -	300	------	100	------
BUILDING MAINTENANCE - - -	200	------	------	------
BUSINESS FORMS - - - - - -	------	------	------	------
CLOTHING - - - - - - - - -	100	------	------	------
INSURANCE - - - - - - - - -	600	------	------	------
LABORATORY SERVICES - - - -	500	------	------	------
LEATHER - - - - - - - - - -	------	------	------	------
LUMBER - - - - - - - - - -	------	------	------	------
PAPER - - - - - - - - - - -	600	------	------	------
PAPER PRODUCTS - - - - - -	400	------	------	------
PATENTS AND LEGAL SERVICES	400	------	------	------
PERSONNEL SERVICES - - - -	300	------	------	------
PRINTING, RELATED SERVICES	300	------	------	------
PULP - - - - - - - - - - -	200	------	------	------
REGULATORY SERVICES - - - -	400	------	------	------
RETAIL TRADE SERVICES - - -	100	------	------	------
RUBBER, FABRICATED PRODUCTS	400	------	------	------
TEXTILES, TEXTILE PRODUCTS	600	------	------	100
TIRES - - - - - - - - - - -	100	------	------	------
TOYS AND AMUSEMENTS - - - -	------	------	------	------
WHOLESALE TRADE SERVICES -	100	------	------	------
WOOD PRODUCTS - - - - - - -	300	------	------	------
OTHER PRODUCT - - - - - - -	1,600	------	------	100
OTHER SERVICE - - - - - - -	3,800	------	100	100
NO REPORT - - - - - - - -	1,200	------	------	------

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F ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

TOTAL	AREAS OF TECHNOLOGY							
	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR- GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON- MENTAL AND STRUCTURAL	ELECTRO- MAGNETIC	DYNAMICS AND MECHANICS
INUED								
11,800	100	300	500	200	200	700	600	1,000
200	------	------	------	------	------	------	------	------
300	------	100	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	------	------
500	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
600	------	------	------	------	------	------	100	------
400	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	100	------
300	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------
400	------	------	------	------	------	100	------	------
100	------	------	------	------	------	------	------	------
400	------	------	------	------	------	------	------	100
600	------	------	100	------	------	------	------	100
100	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	------
1,600	------	------	100	------	------	100	100	200
3,800	------	100	100	------	200	300	200	300
1,200	------	------	------	100	100	100	100	100

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS

AREAS OF TECHNOLOGY

PRODUCTS OR SERVICES	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION
PRODUCTS OR SERVICES, CONTINUED					
OTHER PRODUCTS, SERVICES	300	200	900	400	4,500
ADVERTISING AND PROMOTION -	------	------	------	------	------
BANKING AND FINANCE - - - -	------	------	------	------	100
BUILDING MAINTENANCE - - -	------	------	------	------	100
BUSINESS FORMS - - - - - -	------	------	------	------	------
CLOTHING - - - - - - - - -	------	------	------	------	100
INSURANCE - - - - - - - - -	------	------	------	------	400
LABORATORY SERVICES - - - -	------	------	------	------	200
LEATHER - - - - - - - - - -	------	------	------	------	------
LUMBER - - - - - - - - - -	------	------	------	------	------
PAPER - - - - - - - - - - -	------	------	100	100	300
PAPER PRODUCTS - - - - - -	------	------	------	------	200
PATENTS AND LEGAL SERVICES	------	------	------	------	------
PERSONNEL SERVICES - - - -	------	------	------	------	100
PRINTING, RELATED SERVICES	------	------	------	------	200
PULP - - - - - - - - - - -	------	------	100	------	100
REGULATORY SERVICES - - - -	------	------	------	------	100
RETAIL TRADE SERVICES - - -	------	------	------	------	100
RUBBER, FABRICATED PRODUCTS	------	------	------	------	200
TEXTILES, TEXTILE PRODUCTS	------	------	100	------	300
TIRES - - - - - - - - - - -	------	------	------	------	100
TOYS AND AMUSEMENTS - - - -	------	------	------	------	------
WHOLESALE TRADE SERVICES -	------	------	------	------	------
WOOD PRODUCTS - - - - - - -	------	------	------	------	100
OTHER PRODUCT - - - - - - -	100	100	100	------	500
OTHER SERVICE - - - - - - -	100	100	200	100	1,100
NO REPORT - - - - - - -	100	------	100	------	200

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND AREAS OF TECHNOLOGY--CONTINUED

	AREAS OF TECHNOLOGY							
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
TINUED								
ES	300	200	900	400	4,500	200	1,100	700
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	100	------
-	------	------	------	------	100	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
-	------	------	------	------	400	------	------	100
-	------	------	------	------	200	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	100	100	300	------	------	------
-	------	------	------	------	200	------	------	------
S	------	------	------	------	------	------	100	------
-	------	------	------	------	100	------	100	------
S	------	------	------	------	200	------	------	------
-	------	------	100	------	100	------	------	------
-	------	------	------	------	100	------	------	------
-	------	------	------	------	100	------	------	------
TS	------	------	------	------	200	------	------	------
S	------	------	100	------	300	------	------	100
-	------	------	------	------	100	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	------	------	------	------
-	------	------	------	------	100	------	------	------
-	100	100	100	------	500	------	100	100
-	100	100	200	100	1,100	100	500	300
-	100	------	100	------	200	------	------	400

TO TOTAL BECAUSE OF ROUNDING.

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIG

HIGHEST DEGREE CUR

PRODUCTS OR SERVICES	TOTAL	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERA
ALL PRODUCTS OR SERVICES - - -	308,000	13,100	26,600	48,600	65,500	26,30
AGRICULTURE AND FOOD - - - - -	4,200	100	600	400	200	40
THIS FIELD GENERALLY - - - - - -	800	------	100	------	------	10
AGRICULTURAL SERVICES - - - - - -	600	------	------	100	------	-----
ANIMALS - - - - - - - - - - - - -	100	------	------	------	------	-----
DISTILLED PRODUCTS - - - - - - -	100	------	------	------	------	-----
FISH PRODUCTS - - - - - - - - - -	------	------	------	------	------	-----
FORESTRY - - - - - - - - - - - -	100	------	------	100	------	-----
FOOD AND BEVERAGE PRODUCTS - - -	1,400	------	300	100	100	30
NATURAL FIBERS - - - - - - - - -	100	------	------	------	------	-----
PLANTS - - - - - - - - - - - - -	100	------	------	------	------	-----
TOBACCO - - - - - - - - - - - - -	100	------	------	------	------	-----
OTHER - - - - - - - - - - - - - -	700	------	100	100	------	-----
AIRCRAFT AND SPACE - - - - - - -	33,800	8,800	1,100	1,200	5,200	3,80
THIS FIELD GENERALLY - - - - - -	6,100	1,600	200	200	900	80
AERONAUTICS - - - - - - - - - - -	2,400	1,300	------	------	200	20
AIRCRAFT - - - - - - - - - - - -	4,900	1,800	100	300	500	40
AIRCRAFT V/STOL - - - - - - - - -	800	400	------	------	100	10
AIRCRAFT ENGINES - - - - - - - -	2,800	500	100	------	100	30
AIRCRAFT PARTS, ACCESSORIES - - -	1,900	200	------	100	500	20
AIRCRAFT SERVICES - - - - - - - -	200	------	------	------	------	-----
AIRLINES - - - - - - - - - - - -	400	100	------	100	100	10
ASTRONAUTICS - - - - - - - - - -	2,000	600	100	------	400	30
LAUNCH VEHICLES - - - - - - - - -	2,100	500	100	100	400	20
RE-ENTRY DEVICES - - - - - - - -	1,500	400	------	------	200	20
SPACECRAFT - - - - - - - - - - -	3,800	700	100	100	800	50
SPACECRAFT ENGINES - - - - - - -	1,300	200	200	------	100	10
SPACECRAFT PARTS, ACCESS. - - - -	700	100	------	------	200	10
SPACECRAFT SERVICES - - - - - - -	300	------	------	------	100	-----
OTHER - - - - - - - - - - - - - -	2,500	400	100	------	600	30
CERAMICS - - - - - - - - - - - -	2,200	------	200	300	200	30
THIS FIELD GENERALLY - - - - - -	200	------	------	------	------	-----
ABRASIVES - - - - - - - - - - - -	100	------	------	------	------	-----
CEMENT, CONCRETE, GYPSUM PROD - - -	500	------	100	200	------	-----
CLAY PRODUCTS - - - - - - - - - -	100	------	------	------	------	-----
GLASS PRODUCTS - - - - - - - - -	600	------	------	------	100	10
INSULATION MATERIALS - - - - - - -	100	------	------	------	------	-----
REFRACTORIES - - - - - - - - - -	300	------	------	------	------	-----
RELATED SERVICES - - - - - - - -	------	------	------	------	------	-----
OTHER - - - - - - - - - - - - - -	200	------	------	------	------	-----

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F ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS

S	TOTAL	HIGHEST DEGREE CURRICULA GROUPS AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
S - - -	308,000	13,100	26,600	48,600	65,500	26,300	58,500	12,800	15,400	34,300	6,800
- - - -	4,200	100	600	400	200	400	600	------	100	1,800	100
- - - -	800	------	100	------	------	100	100	------	------	500	------
- - - -	600	------	------	100	------	------	------	------	------	500	------
- - - -	100	------	------	------	------	------	------	------	------	100	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	100	------	------	------	------	------	------	------
- - -	1,400	------	300	100	100	300	300	------	------	200	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	100	------
- - - -	100	------	------	------	------	------	100	------	------	------	------
- - - -	700	------	100	100	------	------	100	------	------	300	------
- - - -	33,800	8,800	1,100	1,200	5,200	3,800	8,500	900	200	3,700	400
- - - -	6,100	1,600	200	200	900	800	1,200	100	------	800	100
- - - -	2,400	1,300	------	------	200	200	400	------	------	200	------
- - - -	4,900	1,800	100	300	500	400	1,100	100	------	500	100
- - - -	800	400	------	------	100	100	200	------	------	------	------
- - - -	2,800	500	100	------	100	300	1,200	300	------	200	------
S - - -	1,900	200	------	100	500	200	600	100	------	200	------
- - - -	200	------	------	------	------	------	------	------	------	------	------
- - - -	400	100	------	100	100	100	100	------	------	------	------
- - - -	2,000	600	100	------	400	300	300	------	------	300	------
- - - -	2,100	500	100	100	400	200	600	------	------	200	------
- - - -	1,500	400	------	------	200	200	500	------	------	100	------
- - - -	3,800	700	100	100	800	500	1,000	100	------	400	------
- - - -	1,300	200	200	------	100	100	500	100	------	100	------
- - - -	700	100	------	------	200	100	300	------	------	100	------
- - - -	300	------	------	------	100	------	------	------	------	------	------
- - - -	2,500	400	100	------	600	300	500	------	------	400	------
- - - -	2,200	------	200	300	200	300	400	200	100	400	------
- - - -	200	------	------	------	------	------	------	------	------	100	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
D - - -	500	------	100	200	------	------	100	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	600	------	------	------	100	100	200	------	------	------	------
- - - -	100	------	------	------	------	------	------	------	------	------	------
- - - -	300	------	------	------	------	------	------	100	------	100	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	200	------	------	------	------	------	------	100	------	100	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHE

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE			
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL
PRODUCTS OR SERVICES, CONTINUED					
CHEMICALS, ALLIED PROD. - - -	20,300	100	12,100	500	900
THIS FIELD GENERALLY - - - - - -	4,300	------	2,600	100	200
AGRICULTURAL CHEMICALS - - - - -	500	------	400	------	------
CARBON PRODUCTS - - - - - - - - -	500	------	200	------	------
CHEMICAL SERVICES - - - - - - - -	100	------	100	------	------
COSMETICS - - - - - - - - - - - -	100	------	100	------	------
DRUGS AND PHARMACEUTICALS - - - -	800	------	400	------	------
DYES AND ORGANIC PIGMENTS - - - -	100	------	100	------	------
ELASTOMERS - - - - - - - - - - -	200	------	200	------	------
EXPLOSIVES - - - - - - - - - - -	300	------	100	------	------
FERMENTATION PRODUCTS - - - - - -	100	------	100	------	------
FERTILIZER - - - - - - - - - - -	300	------	200	------	------
GASES - - - - - - - - - - - - -	400	------	100	------	------
INDUSTRIAL CHEMICALS - - - - - -	1,900	------	1,200	100	100
INORGANICS - - - - - - - - - - -	500	------	300	------	------
NUCLEAR,RADIOACT. MATERIALS - - -	1,000	------	400	------	100
ORGANICS - - - - - - - - - - - -	1,000	------	800	------	------
PAINTS AND COATINGS - - - - - - -	300	------	200	------	------
PETROCHEMICALS - - - - - - - - -	2,200	------	1,500	100	100
PHOTOGRAPHIC CHEMICALS - - - - -	200	------	100	------	------
PLASTICS,SYNTHETIC POLYMERS - - -	2,700	------	1,700	------	100
PROPELLANTS - - - - - - - - - - -	300	------	100	------	------
SOAP AND DETERGENTS - - - - - - -	400	------	200	------	------
SYNTHETIC FIBERS - - - - - - - -	1,000	------	500	------	------
OTHER - - - - - - - - - - - - - -	1,100	------	600	------	100
COMMUNICATIONS - - - - - - - - -	8,100	100	100	200	5,400
THIS FIELD GENERALLY - - - - - -	2,600	------	100	------	1,700
BROADCASTING - - - - - - - - - -	500	------	------	------	400
CABLE TELEVISION - - - - - - - -	100	------	------	------	100
COMMUNICATION SERVICES - - - - -	1,100	------	------	------	800
MOTION PICTURES - - - - - - - - -	------	------	------	------	------
TELEGRAPH - - - - - - - - - - - -	100	------	------	------	100
TELEPHONE - - - - - - - - - - - -	2,800	------	------	100	1,800
OTHER - - - - - - - - - - - - - -	800	------	------	------	600

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INEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

ES	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
TINUED											
L - - -	20,300	100	12,100	500	900	1,100	2,700	300	200	2,200	200
- - - -	4,300	------	2,600	100	200	200	500	100	------	400	------
- - - -	500	------	400	------	------	------	------	------	------	------	------
- - - -	500	------	200	------	------	------	100	------	------	------	------
- - - -	100	------	100	------	------	------	------	------	------	------	------
- - - -	100	------	100	------	------	------	------	------	------	------	------
- - - -	800	------	400	------	------	100	100	------	------	100	------
- - - -	100	------	100	------	------	------	------	------	------	------	------
- - - -	200	------	200	------	------	------	------	------	------	------	------
- - - -	300	------	100	------	------	------	------	------	100	------	------
- - - -	100	------	100	------	------	------	------	------	------	------	------
- - - -	300	------	200	------	------	------	------	------	------	------	------
- - - -	400	------	100	------	------	------	100	------	------	100	------
- - - -	1,900	------	1,200	100	100	------	300	------	------	200	------
- - - -	500	------	300	------	------	------	------	------	------	100	------
LS - - -	1,000	------	400	------	100	100	100	100	------	100	------
- - - -	1,000	------	800	------	------	------	100	------	------	100	------
- - - -	300	------	200	------	------	------	------	------	------	100	------
- - - -	2,200	------	1,500	100	100	------	300	------	------	200	------
- - - -	200	------	100	------	------	------	------	------	------	------	------
RS - - -	2,700	------	1,700	------	100	200	400	------	------	300	------
- - - -	300	------	100	------	------	100	------	------	------	------	------
- - - -	400	------	200	------	------	------	100	------	------	------	------
- - - -	1,000	------	500	------	------	100	300	------	------	100	------
- - - -	1,100	------	600	------	100	100	100	------	------	100	------
- - - -	8,100	100	100	200	5,400	700	400	100	------	900	300
- - - -	2,600	------	100	------	1,700	200	100	------	------	300	100
- - - -	500	------	------	------	400	------	------	------	------	------	------
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	1,100	------	------	------	800	100	------	------	------	100	------
- - - -	------	------	------	------	------	------	------	------	------	------	------
- - - -	100	------	------	------	100	------	------	------	------	------	------
- - - -	2,800	------	------	100	1,800	200	200	------	------	300	100
- - - -	800	------	------	------	600	------	100	------	------	100	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGH

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGRE			
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL
PRODUCTS OR SERVICES, CONTINUED					
COMPUTERS - - - - - - - - - - -	11,100	300	500	400	5,500
THIS FIELD GENERALLY - - - - - - -	4,000	100	200	100	1,900
ANALOG EQUIPMENT - - - - - - - -	200	------	------	------	100
COMPONENTS AND PARTS - - - - - - -	400	------	------	------	100
COMPUTER SERVICES - - - - - - - - -	1,000	------	100	100	300
DIGITAL EQUIPMENT - - - - - - - - -	1,900	------	------	------	1,500
HYBRID EQUIPMENT - - - - - - - - -	200	------	------	------	100
MEMORY UNITS - - - - - - - - - - -	300	------	------	------	200
OPTICAL EQUIPMENT - - - - - - - - -	100	------	------	------	------
PERIPHERAL EQUIPMENT - - - - - - -	1,100	------	------	------	600
SOFTWARE - - - - - - - - - - - - -	1,400	100	100	100	400
OTHER - - - - - - - - - - - - - - -	500	------	------	------	200
CONSTRUCTION,CIVIL ENGR. - - -	49,200	400	1,000	34,700	1,500
THIS FIELD GENERALLY - - - - - - -	10,600	100	200	7,400	400
AIRPORTS AND FACILITIES - - - - - -	700	------	------	500	------
ARCHITECTURE - - - - - - - - - - -	600	------	------	400	------
BRIDGES - - - - - - - - - - - - - -	2,200	------	------	1,900	------
BUILDINGS AND STRUCTURES - - - -	8,100	100	100	5,700	200
CHEMICAL PLANTS, FACILITIES - - -	1,700	------	500	600	100
CITY,REGION.,URBAN PLANNING - - -	700	------	------	400	------
CONSTRUCTION SERVICES - - - - - -	900	------	------	600	------
DAMS, WATER CONTROL STRUCT. - - -	2,600	------	------	1,900	------
EXCAVATION AND FOUNDATION - - - -	700	------	------	500	------
HEAVY CONSTRUCTION - - - - - - - -	1,100	------	------	900	------
HIGHWAYS - - - - - - - - - - - - -	5,200	------	------	4,400	------
HYDRO-ELECTRIC FACILITIES - - - -	500	------	------	300	100
INDUST. PLANTS, FACILITIES - - -	2,100	------	100	900	300
LANDSCAPING - - - - - - - - - - - -	------	------	------	------	------
MILITARY CONSTRUCTION - - - - - -	1,200	------	------	700	------
PREFABRICATED CONSTRUCTION - - -	300	------	------	200	------
PUBLIC WORKS - - - - - - - - - - -	2,700	------	------	2,200	------
RECREATIONAL FACILITIES - - - - - -	100	------	------	100	------
RIVERS AND HARBORS - - - - - - - -	500	------	------	400	------
SANITARY FACILITIES - - - - - - - -	1,900	------	------	1,600	------
SPACECRAFT,MISSILE FACILIT. - - -	200	------	------	100	------
SURVEYING AND MAPPING - - - - - -	700	------	------	400	------
THIN-SHELL CONSTRUCTION - - - - -	100	------	------	100	------
TUNNELING - - - - - - - - - - - - -	200	------	------	100	------
WATER SUPPLY AND TREATMENT - - -	1,400	------	100	1,000	------
OTHER - - - - - - - - - - - - - - -	2,200	------	100	1,400	100

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NEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

S	TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
NUED											
- - -	11,100	300	500	400	5,500	1,400	1,100	100	100	1,500	100
- - -	4,000	100	200	100	1,900	500	400	------	100	700	------
- - -	200	------	------	------	100	------	------	------	------	------	------
- - -	400	------	------	------	100	100	100	------	------	100	------
- - -	1,000	------	100	100	300	200	100	------	------	200	------
- - -	1,900	------	------	------	1,500	100	100	------	------	100	------
- - -	200	------	------	------	100	------	------	------	------	------	------
- - -	300	------	------	------	200	------	------	------	------	------	------
- - -	100	------	------	------	------	------	------	------	------	------	------
- - -	1,100	------	------	------	600	100	200	------	------	100	------
- - -	1,400	100	100	100	400	200	200	------	100	300	------
- - -	500	------	------	------	200	100	------	------	------	100	------
- - -	49,200	400	1,000	34,700	1,500	1,500	3,700	100	900	3,600	1,900
- - -	10,600	100	200	7,400	400	300	800	------	200	700	500
- - -	700	------	------	500	------	------	------	------	------	------	------
- - -	600	------	------	400	------	------	100	------	------	------	------
- - -	2,200	------	------	1,900	------	------	------	------	------	------	100
- - -	8,100	100	100	5,700	200	300	900	------	------	600	300
- - -	1,700	------	500	600	100	100	300	------	------	100	------
- - -	700	------	------	400	------	------	------	------	------	100	------
- - -	900	------	------	600	------	------	100	------	------	100	------
- - -	2,600	------	------	1,900	------	------	100	------	100	400	100
- - -	700	------	------	500	------	------	------	------	100	------	------
- - -	1,100	------	------	900	------	------	100	------	------	------	------
- - -	5,200	------	------	4,400	------	------	------	------	100	200	300
- - -	500	------	------	300	100	------	100	------	------	------	------
- - -	2,100	------	100	900	300	100	500	------	------	100	100
- - -	------	------	------	------	------	------	------	------	------	------	------
- - -	1,200	------	------	700	------	100	100	------	------	200	------
- - -	300	------	------	200	------	------	------	------	------	------	------
- - -	2,700	------	------	2,200	------	------	100	------	------	200	100
- - -	100	------	------	100	------	------	------	------	------	------	------
- - -	500	------	------	400	------	------	------	------	------	------	------
- - -	1,900	------	------	1,600	------	------	100	------	------	100	------
- - -	200	------	------	100	------	------	------	------	------	------	------
- - -	700	------	------	400	------	------	------	------	------	100	100
- - -	100	------	------	100	------	------	------	------	------	------	------
- - -	200	------	------	100	------	------	------	------	100	------	------
- - -	1,400	------	100	1,000	------	------	100	------	------	100	------
- - -	2,200	------	100	1,400	100	100	200	------	------	300	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGR

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE CURRIC				
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL
PRODUCTS OR SERVICES, CONTINUED						
EDUC., INFORMATION SERV. - - -	15,400	500	1,400	2,500	2,000	2,400
THIS FIELD GENERALLY - - - - - -	2,500	100	300	300	300	400
ENGINEERING INSTRUCTION - - - - -	10,400	400	900	1,900	1,400	1,600
INFORMATION SERVICES - - - - - -	400	------	100	------	100	100
LIBRARIES - - - - - - - - - - - -	------	------	------	------	------	------
TECHNICAL INSTRUCTION - - - - - -	1,200	------	------	100	200	200
OTHER - - - - - - - - - - - - - -	900	------	------	200	100	100
ELECTRICAL EQUIP., SERV. - - -	20,400	200	400	300	13,200	1,300
THIS FIELD GENERALLY - - - - - -	4,100	------	------	------	3,200	200
BUSINESS, OFFICE EQUIPMENT - - -	600	------	------	------	200	100
COMPONENTS AND ACCESSORIES - - -	800	------	------	------	400	100
CONTROLS - - - - - - - - - - - -	1,500	------	------	------	900	100
ELECTRICAL SERVICES - - - - - - -	400	------	------	------	300	------
HOUSEHOLD APPLIANCES - - - - - -	600	------	------	------	200	100
INDUSTRIAL ELEC. EQUIPMENT - - -	2,800	------	------	------	2,100	100
INSTRUMENTS, TEST EQUIPMENT - - -	1,300	------	100	------	600	100
INSULATED CONDUCTORS - - - - - -	400	------	------	------	200	------
LIGHTING AND WIRING - - - - - - -	500	------	------	------	400	------
MAGNETIC DEVICES - - - - - - - -	300	------	------	------	200	------
POWER GENERATION - - - - - - - -	2,200	------	100	100	1,100	200
RURAL ELECTRIFICATION - - - - - -	200	------	------	------	100	------
STORAGE BATTERIES - - - - - - - -	100	------	------	------	------	------
SWITCHGEAR - - - - - - - - - - -	600	------	------	------	500	------
TELEPHONE EQUIPMENT - - - - - - -	600	------	------	------	300	100
TRANSFORMERS - - - - - - - - - -	900	------	------	------	600	100
TRANSMISSION, DISTRIBUTION - - -	1,700	------	------	100	1,300	100
WELDING APPARATUS - - - - - - - -	200	------	------	------	100	------
OTHER - - - - - - - - - - - - - -	800	------	------	------	500	100

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NG CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

CTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
,400	500	1,400	2,500	2,000	2,400	3,100	600	500	2,400	10C
,500	100	300	300	300	400	400	100	100	400	------
,400	400	900	1,900	1,400	1,600	2,400	400	100	1,200	------
400	------	100	------	100	100	100	------	------	100	------
----	------	------	------	------	------	------	------	------	------	------
,200	------	------	100	200	200	200	------	100	300	------
900	------	------	200	100	100	100	------	100	300	------
,400	200	400	300	13,200	1,300	2,600	300	------	1,600	500
,100	------	------	------	3,200	200	200	------	------	300	20C
600	------	------	------	200	100	200	------	------	100	------
800	------	------	------	400	100	100	------	------	100	------
,500	------	------	------	900	100	200	------	------	100	------
400	------	------	------	300	------	------	------	------	------	------
600	------	------	------	200	100	200	------	------	100	------
,800	------	------	------	2,100	100	300	------	------	200	10C
,300	------	100	------	600	100	200	------	------	200	------
400	------	------	------	200	------	------	------	------	100	------
500	------	------	------	400	------	100	------	------	------	------
300	------	------	------	200	------	------	------	------	------	------
,200	------	100	100	1,100	200	600	------	------	200	------
200	------	------	------	100	------	------	------	------	100	------
100	------	------	------	------	------	------	------	------	------	------
600	------	------	------	500	------	------	------	------	------	------
600	------	------	------	300	100	100	------	------	100	------
900	------	------	------	600	100	100	------	------	------	------
,700	------	------	100	1,300	100	100	------	------	100	10C
200	------	------	------	100	------	------	------	------	------	------
800	------	------	------	500	100	100	------	------	100	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIG

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGR			
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL
PRODUCTS OR SERVICES, CONTINUED					
ELECTRONIC EQUIP., SERV. - - -	23,500	400	400	200	15,100
THIS FIELD GENERALLY - - - - - -	5,500	100	100	------	3,500
ANTENNAS - - - - - - - - - - - -	700	------	------	------	500
AUDIO - - - - - - - - - - - - - -	200	------	------	------	100
COMPONENTS AND ACCESSORIES - - -	900	------	------	------	500
CONTROLS - - - - - - - - - - - -	1,000	------	100	------	700
ELECTROACOUSTIC TRANSDUCERS - - -	------	------	------	------	------
ELECTRO-OPTICAL DEVICES - - - - -	900	------	------	------	600
ELECTRON TUBES - - - - - - - - -	800	------	------	------	500
ELECTRONIC EQUIP. GENERALLY - - -	3,300	100	------	------	2,300
ELECTRONIC SERVICES - - - - - - -	200	------	------	------	200
INSTRUMENTS, TEST EQUIPMENT - - -	2,700	------	100	------	1,700
INTEGRATED CIRCUITS - - - - - - -	700	------	------	------	400
LASERS - - - - - - - - - - - - -	200	------	------	------	100
MICROWAVE AND RADAR - - - - - - -	2,600	------	------	------	2,000
RADIO AND TV RECEIVERS - - - - -	400	------	------	------	300
RADIO AND TV TRANSMITTERS - - - -	100	------	------	------	100
RECORDING - - - - - - - - - - - -	200	------	------	------	100
SEMICONDUCTOR DEVICES - - - - - -	1,000	------	------	------	500
SONAR - - - - - - - - - - - - - -	600	------	------	------	400
SONIC, ULTRASONIC DEVICES - - - -	100	------	------	------	100
THERMO-ELECTRIC DEVICES - - - - -	100	------	------	------	------
X-RAY - - - - - - - - - - - - - -	100	------	------	------	100
OTHER - - - - - - - - - - - - - -	1,200	------	------	------	700
LAB-SCI-PHOTO-OPT EQUIP. - - -	2,900	100	200	100	700
THIS FIELD GENERALLY - - - - - -	700	------	100	------	200
LAB., SCIENTIFIC APPARATUS - - -	500	------	100	------	100
MEASURING,CONTROL INSTRUM. - - -	800	------	------	------	200
OPTICAL INSTRUMENTS, LENSES - - -	200	------	------	------	100
PHOTOGRAPHIC EQUIPMENT - - - - -	300	------	------	------	100
TEMPERATURE MEASUREMENT - - - - -	200	------	------	------	------
TIMING DEVICES - - - - - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - - - - -	200	------	------	------	------

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EETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
23,500	400	400	200	15,100	2,000	1,800	300	100	3,000	400
5,500	100	100	------	3,500	500	300	100	------	800	100
700	------	------	------	500	------	100	------	------	100	------
200	------	------	------	100	------	------	------	------	------	------
900	------	------	------	500	100	200	------	------	100	------
1,000	------	100	------	700	------	100	------	------	100	------
------	------	------	------	------	------	------	------	------	------	------
900	------	------	------	600	100	100	------	------	100	------
800	------	------	------	500	100	------	------	------	200	------
3,300	100	------	------	2,300	200	300	------	------	300	100
200	------	------	------	200	------	------	------	------	------	------
2,700	------	100	------	1,700	200	300	------	------	300	------
700	------	------	------	400	100	------	------	------	100	------
200	------	------	------	100	------	------	------	------	------	------
2,600	------	------	------	2,000	100	100	------	------	300	------
400	------	------	------	300	------	------	------	------	100	------
100	------	------	------	100	------	------	------	------	------	------
200	------	------	------	100	------	------	------	------	------	------
1,000	------	------	------	500	200	100	100	------	200	------
600	------	------	------	400	100	------	------	------	100	------
100	------	------	------	100	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	100	------	------	------	------	------	------
1,200	------	------	------	700	100	200	------	------	200	------
2,900	100	200	100	700	400	700	100	------	500	100
700	------	100	------	200	100	100	------	------	100	------
500	------	100	------	100	100	100	------	------	------	------
800	------	------	------	200	100	200	------	------	100	------
200	------	------	------	100	------	100	------	------	------	------
300	------	------	------	100	------	100	------	------	100	------
200	------	------	------	------	------	100	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE CURRICULA				
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL
PRODUCTS OR SERVICES, CONTINUED						
MACHINERY, MECH. EQUIP. - - -	30,100	500	1,100	1,200	2,100	3,000
THIS FIELD GENERALLY - - - - - -	5,100	100	200	200	200	500
AIR COMPRESSORS, BLOWERS - - - -	900	------	------	------	100	100
AIR CONDITIONING, HEATING - - -	8,300	100	200	400	500	700
BEARINGS - - - - - - - - - - -	500	------	------	------	------	100
CONSTRUCTION EQUIPMENT - - - - -	600	------	------	100	------	100
DIES, JIGS, PATTERNS - - - - - -	100	------	------	------	------	------
DISTILLING EQUIPMENT - - - - - -	100	------	------	------	------	------
FARM MACHINERY - - - - - - - - -	1,400	------	------	------	------	100
FOOD MACHINERY - - - - - - - - -	200	------	------	------	------	------
FURNACES, HEATING EQUIPMENT - - -	900	------	100	------	100	100
GEARS - - - - - - - - - - - - - -	100	------	------	------	------	------
HYDRAULIC MACHINERY - - - - - - -	400	------	------	------	------	------
INDUSTRIAL MACHINERY, EQUIP. - - -	1,400	------	100	------	200	200
INTERNAL COMBUSTION ENGINES - - -	500	------	------	------	------	100
MACHINE TOOLS, ACCESSORIES - - -	700	------	------	------	100	200
MATERIALS HANDLING MACH. - - - -	800	------	------	100	100	100
MINING MACHINERY - - - - - - - -	300	------	------	------	------	------
NUCLEAR MACHINERY - - - - - - - -	1,200	100	100	------	100	100
PAPER MACHINERY - - - - - - - - -	300	------	------	------	------	------
PNEUMATIC EQUIPMENT - - - - - - -	300	------	------	------	------	100
POWER TRANSMISSION EQUIP. - - -	300	------	------	------	------	------
PRINTING, DUPLICATING MACH. - - -	200	------	------	------	------	------
PUMPS, LIQUID HANDLING EQUIP - - -	1,200	------	100	100	------	100
REFRIGERATING EQUIPMENT - - - - -	700	------	------	------	100	100
SPECIALIZED INDUSTRIAL MACH - - -	1,000	------	100	------	100	100
STEAM ENGINES - - - - - - - - - -	100	------	------	------	------	------
TEXTILE MACHINERY - - - - - - - -	200	------	------	------	------	------
TURBINES - - - - - - - - - - - - -	800	------	------	------	100	100
VENDING, SERVICE MACHINERY - - -	------	------	------	------	------	------
OTHER - - - - - - - - - - - - - - -	1,500	------	100	100	100	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

EETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
30,100	500	1,100	1,200	2,100	3,000	16,500	700	400	3,400	1,200
5,100	100	200	200	200	500	3,200	------	100	400	300
900	------	------	------	100	100	600	------	------	100	------
8,300	100	200	400	500	700	5,100	100	------	600	500
500	------	------	------	------	100	300	100	------	100	------
600	------	------	100	------	100	200	100	------	100	------
100	------	------	------	------	------	100	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
1,400	------	------	------	------	100	300	------	------	900	------
200	------	------	------	------	------	100	------	------	------	------
900	------	100	------	100	100	400	100	------	100	------
100	------	------	------	------	------	100	------	------	------	------
400	------	------	------	------	------	300	------	------	100	------
1,400	------	100	------	200	200	700	------	------	100	------
500	------	------	------	------	100	300	------	------	------	------
700	------	------	------	100	200	300	------	------	100	------
800	------	------	100	100	100	400	------	------	100	------
300	------	------	------	------	------	100	------	100	------	------
1,200	100	100	------	100	100	600	------	------	100	------
300	------	------	------	------	------	200	------	------	------	------
300	------	------	------	------	100	200	------	------	------	------
300	------	------	------	------	------	200	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------
1,200	------	100	100	------	100	600	------	------	100	------
700	------	------	------	100	100	400	------	------	100	------
1,000	------	100	------	100	100	400	------	------	100	100
100	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------
800	------	------	------	100	100	600	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
1,500	------	100	100	100	100	700	------	------	200	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL P

NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHE

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE			
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL
PRODUCTS OR SERVICES, CONTINUED					
MARINE TRANSPORTATION - - - -	5,000	200	100	400	500
THIS FIELD GENERALLY - - - - - -	700	------	------	100	100
BOATS AND SMALL CRAFT - - - - - -	200	------	------	------	------
INLAND WATERWAY CRAFT,SERV. - - -	------	------	------	------	------
MARINE AUXILIARIES - - - - - - -	100	------	------	------	------
MARINE ENGINES - - - - - - - - -	100	------	------	------	------
MERCHANT SHIPS - - - - - - - - -	300	------	------	------	------
NAVAL ARCHITECTURAL SER. - - - -	700	------	------	100	------
NAVAL VESSELS - - - - - - - - -	1,000	------	------	100	100
OCEAN TRANSPORTATION - - - - - -	200	------	------	------	------
PORT FACILITIES, SERVICES - - -	100	------	------	------	------
PROPELLERS AND SHAFTING - - - -	------	------	------	------	------
SHIPBUILDING,REPAIR SERVICE - - -	800	------	------	100	100
UNDERWATER CRAFT - - - - - - - -	400	------	------	------	100
OTHER - - - - - - - - - - - - -	300	------	------	------	100
MEDICAL, HEALTH SERVICES - - -	1,300	------	200	100	200
THIS FIELD GENERALLY - - - - - -	400	------	------	100	------
ARTIFICIAL ORGANS - - - - - - -	100	------	------	------	------
MEDICAL AND HEALTH CARE - - - - -	200	------	------	------	------
MEDICAL, DENTAL INSTRUMENTS - - -	200	------	------	------	100
MEDICAL LABORATORY SERVICES - - -	------	------	------	------	------
PROSTHETIC DEVICES - - - - - - -	------	------	------	------	------
OTHER - - - - - - - - - - - - - -	400	------	100	------	100
METALS, BASIC - - - - - - - -	13,500	200	1,300	400	600
THIS FIELD GENERALLY - - - - - -	2,600	------	200	------	------
ALUMINUM - - - - - - - - - - - -	1,300	------	200	100	100
COPPER - - - - - - - - - - - - -	500	------	------	------	------
ELECTROMETALLURGICAL PROD. - - -	200	------	------	------	------
FOUNDRIES - - - - - - - - - - - -	600	------	100	------	------
IRON-STEEL MILLS, FOUNDRIES - - -	3,900	100	400	100	300
LEAD AND ZINC - - - - - - - - - -	300	------	100	------	------
METALLURGICAL PRODUCTS - - - - -	800	------	100	------	------
METALLURGICAL SERVICES - - - - -	1,100	------	100	------	------
NON-FERROUS SMELTING - - - - - -	800	------	100	------	------
NON-FERROUS CASTINGS - - - - - -	200	------	------	------	------
RADIOACTIVE METALS - - - - - - -	100	------	------	------	------
RARE METALS - - - - - - - - - - -	------	------	------	------	------
REFRACTORY METALS - - - - - - - -	300	------	------	------	------
OTHER - - - - - - - - - - - - - -	900	------	100	------	------

TING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

HIGHEST DEGREE CURRICULA GROUPS

TOTAL	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
5,000	200	100	400	500	500	1,600	100	------	1,400	100
700	------	------	100	100	100	200	------	------	200	------
200	------	------	------	------	------	------	------	------	100	------
------	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	100	------	------	------	------
300	------	------	------	------	------	200	------	------	100	------
700	------	------	100	------	100	100	------	------	300	------
1,000	------	------	100	100	100	300	100	------	300	------
200	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
800	------	------	100	100	100	300	------	------	200	------
400	------	------	------	100	------	200	------	------	100	------
300	------	------	------	100	------	100	------	------	100	------
1,300	------	200	100	200	200	200	------	------	300	------
400	------	------	100	------	100	100	------	------	100	------
100	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	------	------	------	------	100	------
200	------	------	------	100	------	100	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
400	------	100	------	100	100	------	------	------	100	------
13,500	200	1,300	400	600	1,300	1,300	6,800	400	1,100	100
2,600	------	200	------	------	200	100	1,600	100	100	------
1,300	------	200	100	100	200	300	400	------	100	------
500	------	------	------	------	------	------	200	100	100	------
200	------	------	------	------	------	------	100	------	------	------
600	------	100	------	------	100	100	300	------	------	------
3,900	100	400	100	300	400	500	1,600	100	400	100
300	------	100	------	------	------	------	100	------	------	------
800	------	100	------	------	100	100	500	------	100	------
1,100	------	100	------	------	100	------	700	------	100	------
800	------	100	------	------	------	100	400	100	------	------
200	------	------	------	------	------	------	100	------	------	------
100	------	------	------	------	------	------	100	------	------	------
------	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	200	------	------	------
900	------	100	------	------	100	------	500	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEG

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE CURR				
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL
PRODUCTS OR SERVICES, CONTINUED						
METAL FABRICATED PROD. - - -	6,500	100	300	800	300	1,000
THIS FIELD GENERALLY - - - - - -	1,400	------	100	100	100	200
BOILERS - - - - - - - - - - - - -	500	------	------	------	------	100
CANS AND CONTAINERS - - - - - - -	100	------	------	------	------	------
ELECTROPLATED, COATED PROD. - - -	200	------	100	------	------	------
HARDWARE - - - - - - - - - - - -	100	------	------	------	------	------
MACHINED OR TURNED PRODUCTS - - -	300	------	------	------	------	100
METAL FABRICATION SERVICES - - -	400	------	------	------	------	100
PIPE, FITTINGS, VALVES - - - - -	700	------	------	------	------	100
PRESSURE VESSELS - - - - - - - -	600	------	------	100	------	100
SHEET METAL PRODUCTS - - - - - -	300	------	------	------	------	100
STAMPINGS - - - - - - - - - - - -	200	------	------	------	------	------
STRUCTURAL STEEL PRODUCTS - - -	400	------	------	400	------	------
WELDMENTS - - - - - - - - - - - -	200	------	------	------	------	------
WIRE PRODUCTS - - - - - - - - - -	300	------	------	------	------	100
OTHER - - - - - - - - - - - - - -	700	------	------	100	------	100
MINING - - - - - - - - - - - - -	6,600	100	200	300	200	200
THIS FIELD GENERALLY - - - - - -	2,000	------	------	------	100	------
COAL - - - - - - - - - - - - - -	800	------	------	100	------	------
IRON ORES - - - - - - - - - - - -	600	------	------	100	------	------
MINING SERVICES - - - - - - - - -	300	------	------	------	------	------
NON-FERROUS METAL ORES - - - - -	1,400	------	------	------	100	------
NON-METALLIC MINERALS - - - - - -	500	------	------	100	------	------
QUARRY PRODUCTS - - - - - - - - -	200	------	------	100	------	------
SULFUR - - - - - - - - - - - - -	100	------	------	------	------	------
URANIUM, RADIOACTIVE ORES - - -	300	------	------	------	------	------
OTHER - - - - - - - - - - - - - -	300	------	------	------	------	------
MOTOR VEHICLE TRANS. - - - - -	2,600	100	100	300	300	500
THIS FIELD GENERALLY - - - - - -	500	------	------	100	------	100
AUTOMOBILES - - - - - - - - - - -	800	------	------	------	100	100
BUSES, TRUCKS, TRAILERS - - - - -	300	------	------	------	------	100
ENGINES - - - - - - - - - - - - -	200	------	------	------	------	------
MOTORCYCLES, ETC. - - - - - - - -	------	------	------	------	------	------
MOTOR TRANSPORTATION SERV. - - -	------	------	------	------	------	------
PARTS AND ACCESSORIES - - - - - -	600	------	------	------	100	100
OTHER - - - - - - - - - - - - - -	200	------	------	------	------	------

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ETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
6,500	100	300	800	300	1,000	2,200	900	100	500	200
1,400	------	100	100	100	200	500	300	------	100	------
500	------	------	------	------	100	300	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
200	------	100	------	------	------	------	------	------	------	------
100	------	------	------	------	------	100	------	------	------	------
300	------	------	------	------	100	100	------	------	------	------
400	------	------	------	------	100	100	100	------	------	------
700	------	------	------	------	100	300	100	------	100	------
600	------	------	100	------	100	300	------	------	------	------
300	------	------	------	------	100	100	------	------	100	------
200	------	------	------	------	------	100	------	------	------	------
400	------	------	400	------	------	------	------	------	------	------
200	------	------	------	------	------	100	100	------	------	------
300	------	------	------	------	100	100	100	------	------	------
700	------	------	100	------	100	200	100	------	100	------
6,600	100	200	300	200	200	300	500	4,500	300	100
2,000	------	------	------	100	------	100	100	1,600	100	------
800	------	------	100	------	------	100	------	500	100	------
600	------	------	100	------	------	------	100	300	------	------
300	------	------	------	------	------	------	------	200	------	------
1,400	------	------	------	100	------	------	100	1,000	100	------
500	------	------	100	------	------	------	------	300	------	------
200	------	------	100	------	------	------	------	100	------	------
100	------	------	------	------	------	------	------	------	------	------
300	------	------	------	------	------	------	------	200	------	------
300	------	------	------	------	------	------	------	300	------	------
2,600	100	100	300	300	500	900	200	------	300	------
500	------	------	100	------	100	100	100	------	------	------
800	------	------	------	100	100	300	100	------	100	------
300	------	------	------	------	100	100	------	------	------	------
200	------	------	------	------	------	100	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	-----
600	------	------	------	100	100	200	------	------	100	------
200	------	------	------	------	------	100	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AN

HIGHEST

PRODUCTS OR SERVICES	TOTAL	AERO-SPACE	CHEMICAL	CIVIL	EL TRI
PRODUCTS OR SERVICES, CONTINUED					
ORDNANCE - - - - - - - - - - -	5,200	500	300	200	1,
THIS FIELD GENERALLY - - - - - -	1,200	100	100	100	
AMMUNITION - - - - - - - - - -	300	------	------	------	---
FIRE CONTROL EQUIPMENT - - - - -	500	------	------	------	
GUIDED MISSILES - - - - - - - - -	2,100	300	100	------	
GUNS - - - - - - - - - - - - -	100	------	------	------	---
ORDNANCE SERVICES - - - - - - - -	100	------	------	------	---
SMALL ARMS - - - - - - - - - -	100	------	------	------	---
TANKS - - - - - - - - - - - - -	100	------	------	------	---
OTHER - - - - - - - - - - - - -	800	100	------	------	
PETROLEUM - - - - - - - - - -	16,100	200	3,000	900	
THIS FIELD GENERALLY -- - - - - -	6,000	100	1,200	300	
ASPHALT MATERIALS - - - - - - - -	100	------	------	------	---
CRUDE PETROLEUM - - - - - - - - -	1,700	------	200	100	---
GAS PIPELINES - - - - - - - - -	400	------	------	100	
LIQUIFIED GAS - - - - - - - - -	100	------	------	------	---
LUBRICATING OIL AND GREASE - - -	200	------	100	------	---
NATURAL GAS - - - - - - - - - -	600	------	100	100	---
OILFIELD SERVICES - - - - - - - -	1,400	------	100	------	
OIL PIPELINES - - - - - - - - -	300	------	------	------	---
REFINERY PRODUCTS - - - - - - - -	1,500	------	900	100	
RESERVOIRS (OIL AND GAS) - - - -	2,400	------	200	100	
OTHER - - - - - - - - - - - - -	1,200	------	200	100	
RAILWAY, RAPID TRANSIT - - - -	1,700	------	------	400	
THIS FIELD GENERALLY - - - - - -	500	------	------	200	
RAILROAD EQUIPMENT - - - - - - -	600	------	------	------	
RAILROAD TRANSPORTATION - - - - -	200	------	------	100	---
RAILWAY SERVICES - - - - - - - -	------	------	------	------	---
RAPID TRANSIT - - - - - - - - -	200	------	------	100	
OTHER - - - - - - - - - - - - -	100	------	------	------	---
UTILITIES - - - - - - - - - -	15,200	100	400	1,700	7,
THIS FIELD GENERALLY - - - - - -	1,100	------	100	100	
ELECTRIC UTILITIES - - - - - - -	8,900	100	100	500	5,
ELECTRIC AND GAS UTILITIES - - -	2,800	------	------	200	1,
GAS UTILITIES - - - - - - - - -	800	------	100	200	
SANITARY SERVICES - - - - - - - -	100	------	------	100	---
SEWERAGE,WASTE DISPOSAL SER - - -	500	------	100	300	---
WATER SUPPLY AND TREATMENT - - -	800	------	100	400	
OTHER - - - - - - - - - - - - -	300	------	------	------	

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ETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

TOTAL	HIGHEST DEGREE CURRICULA GROUPS									
	AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	METAL-LURGICAL	MINERAL	OTHER	NO REPORT OF CUR-RICULUM
5,200	500	300	200	1,400	600	1,500	100	------	600	100
1,200	100	100	100	200	200	300	------	------	200	100
300	------	------	------	------	------	100	------	------	------	------
500	------	------	------	300	------	100	------	------	100	------
2,100	300	100	------	600	200	500	------	------	200	------
100	------	------	------	------	------	100	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	100	------	------	------	------
800	100	------	------	200	100	300	------	------	100	------
16,100	200	3,000	900	700	600	2,300	100	7,100	1,100	200
6,000	100	1,200	300	300	200	600	------	2,800	500	100
100	------	------	------	------	------	------	------	------	------	------
1,700	------	200	100	------	------	200	------	1,000	------	------
400	------	------	100	100	------	100	------	100	------	------
100	------	------	------	------	------	------	------	------	------	------
200	------	100	------	------	------	100	------	------	------	------
600	------	100	100	------	------	100	------	200	------	------
1,400	------	100	------	100	100	200	------	700	100	------
300	------	------	------	------	------	100	------	------	------	------
1,500	------	900	100	100	------	300	------	------	200	------
2,400	------	200	100	100	------	200	------	1,700	200	------
1,200	------	200	100	100	100	200	------	400	100	------
1,700	------	------	400	300	200	400	------	------	100	100
500	------	------	200	100	------	100	------	------	100	------
600	------	------	------	100	100	300	------	------	------	------
200	------	------	100	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
200	------	------	100	100	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
15,200	100	400	1,700	7,300	600	3,200	100	300	1,100	500
1,100	------	100	100	300	100	300	------	------	100	------
8,900	100	100	500	5,300	300	1,700	100	------	700	300
2,800	------	------	200	1,600	100	600	------	------	100	100
800	------	100	200	100	------	200	------	100	100	------
100	------	------	100	------	------	------	------	------	------	------
500	------	100	300	------	------	100	------	------	------	------
800	------	100	400	100	------	100	------	------	100	------
300	------	------	------	100	------	100	------	------	------	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA

PRODUCTS OR SERVICES	TOTAL	HIGHEST DEGREE CURRICULA GROUPS						
		AERO-SPACE	CHEMICAL	CIVIL	ELEC-TRICAL	GENERAL	MECHAN-ICAL	ME LUR
PRODUCTS OR SERVICES, CONTINUED								
OTHER PRODUCTS, SERVICES - - -	11,800	300	1,300	1,000	1,400	2,200	2,400	
ADVERTISING AND PROMOTION - - - -	200	------	------	------	------	------	------	--
BANKING AND FINANCE - - - - - - -	300	------	------	------	------	------	------	--
BUILDING MAINTENANCE - - - - - -	200	------	------	------	------	------	100	--
BUSINESS FORMS - - - - - - - - - -	------	------	------	------	------	------	------	--
CLOTHING - - - - - - - - - - - -	100	------	------	------	------	100	------	--
INSURANCE - - - - - - - - - - - -	600	------	------	100	100	100	100	--
LABORATORY SERVICES - - - - - - -	500	------	100	100	100	------	100	--
LEATHER - - - - - - - - - - - - -	------	------	------	------	------	------	------	--
LUMBER - - - - - - - - - - - - -	------	------	------	------	------	------	------	--
PAPER - - - - - - - - - - - - - -	600	------	100	------	100	100	200	--
PAPER PRODUCTS - - - - - - - - -	400	------	100	------	------	100	100	--
PATENTS AND LEGAL SERVICES - - -	400	------	------	------	100	------	------	--
PERSONNEL SERVICES - - - - - - -	300	------	100	------	------	100	------	--
PRINTING, RELATED SERVICES - - -	300	------	------	------	------	100	100	--
PULP - - - - - - - - - - - - - -	200	------	100	------	------	------	------	--
REGULATORY SERVICES - - - - - - -	400	------	------	100	100	------	100	--
RETAIL TRADE SERVICES - - - - - -	100	------	------	------	------	------	------	--
RUBBER, FABRICATED PRODUCTS - - -	400	------	100	------	------	100	100	--
TEXTILES, TEXTILE PRODUCTS - - -	600	------	100	------	------	200	100	--
TIRES - - - - - - - - - - - - - -	100	------	------	------	------	------	100	--
TOYS AND AMUSEMENTS - - - - - - -	------	------	------	------	------	------	------	--
WHOLESALE TRADE SERVICES - - - -	100	------	------	------	------	------	------	--
WOOD PRODUCTS - - - - - - - - - -	300	------	------	100	------	100	------	--
OTHER PRODUCT - - - - - - - - - -	1,600	------	200	100	200	300	400	
OTHER SERVICE - - - - - - - - - -	3,800	100	300	400	500	700	700	
NO REPORT - - - - - - - - - -	1,200	------	100	200	200	200	100	

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE
ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTA
(COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL,
ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHA
(METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER
BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADM
PHYSICS, OTHER NONENGINEERING).

STER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

BY PRODUCTS OR SERVICES AND HIGHEST DEGREE CURRICULA GROUPS--CONTINUED

HIGHEST DEGREE CURRICULA GROUPS

RO- ACE	CHEMICAL	CIVIL	ELEC- TRICAL	GENERAL	MECHAN- ICAL	METAL- LURGICAL	MINERAL	OTHER	NO REPORT OF CUR- RICULUM
300	1,300	1,000	1,400	2,200	2,400	200	300	2,400	200
---	------	------	------	------	------	------	------	100	------
---	------	------	------	------	------	------	100	100	------
---	------	------	------	------	100	------	------	------	------
---	------	------	------	------	------	------	------	------	------
---	------	------	------	100	------	------	------	------	------
---	------	100	100	100	100	------	------	200	------
---	100	100	100	------	100	------	------	100	------
---	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------
---	100	------	100	100	200	------	------	100	------
---	100	------	------	100	100	------	------	100	------
---	------	------	100	------	------	------	------	300	------
---	100	------	------	100	------	------	------	------	------
---	------	------	------	100	100	------	------	100	------
---	100	------	------	------	------	------	------	------	------
---	------	100	100	------	100	------	------	------	------
---	------	------	------	------	------	------	------	------	------
---	100	------	------	100	100	------	------	100	------
---	100	------	------	200	100	------	------	100	------
---	------	------	------	------	100	------	------	------	------
---	------	------	------	------	------	------	------	------	------
---	------	------	------	------	------	------	------	------	------
---	------	100	------	100	------	------	------	100	------
---	200	100	200	300	400	100	------	200	------
100	300	400	500	700	700	100	100	800	100
---	100	200	200	200	100	100	100	200	------

UNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
IL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
GY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
ICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
RE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATION, CHEMISTRY,

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERS

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND T

CURRICULA	TOTAL	TYPES OF					
		PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL
ALL CURRICULA - - - - -	308,000	211,100	11,400	20,200	900	300	5,400
AERONAUTICAL, ASTRONAUTICAL	13,100	8,400	300	1,000	------	------	500
AGRICULTURAL - - - - - - - -	4,700	2,000	200	900	------	------	100
ARCHITECTURAL - - - - - - - -	1,300	800	200	100	------	------	------
BIOENGINEERING - - - - - - -	400	200	------	100	------	------	------
CERAMIC - - - - - - - - - - -	500	300	------	100	------	------	------
CHEMICAL - - - - - - - - - -	26,600	21,400	400	1,800	100	------	300
CIVIL - - - - - - - - - - - -	43,600	19,600	2,900	2,900	100	------	600
COMMUNICATIONS - - - - - - -	1,600	1,200	------	100	------	------	100
CONSTRUCTION - - - - - - - -	600	400	100	------	------	------	------
ELECTRICAL - - - - - - - - -	47,200	36,000	1,200	1,900	100	------	700
ELECTRONIC - - - - - - - - -	16,800	13,600	300	500	------	------	400
ENGINEERING MECHANICS - - -	4,700	2,800	100	1,000	------	------	100
ENGINEERING GENERAL - - - -	4,900	3,600	200	200	------	------	100
ENGINEERING PHYSICS - - - -	1,700	1,200	------	100	------	------	100
ENGINEERING SCIENCE - - - -	2,100	1,300	100	300	------	------	100
ENGINEERING TECHNOLOGY - -	800	600	------	------	------	------	------
ENVIRONMENTAL - - - - - - -	600	300	------	100	------	------	------
GEOLOGICAL - - - - - - - - -	4,200	2,600	300	300	------	------	------
GEOPHYSICAL - - - - - - - - -	300	200	------	100	------	------	------
INDUSTRIAL - - - - - - - - -	11,300	8,500	300	800	------	------	200
MARINE - - - - - - - - - - -	1,300	1,000	------	------	------	------	------
MATERIALS - - - - - - - - - -	900	400	------	300	------	------	------
MECHANICAL - - - - - - - - -	57,200	42,900	2,200	3,600	200	------	800
METALLURGICAL - - - - - - - -	12,800	9,200	200	1,200	------	------	400
MINERAL - - - - - - - - - - -	400	300	------	100	------	------	------
MINING - - - - - - - - - - -	4,200	2,600	300	200	------	------	------
NAVAL ARCHITECTURE - - - -	1,300	700	100	100	------	------	------
NUCLEAR - - - - - - - - - - -	700	400	------	100	------	------	------
PETROLEUM - - - - - - - - - -	6,400	5,300	300	100	------	------	------
SANITARY - - - - - - - - - -	1,900	700	100	300	------	------	------
TEXTILE - - - - - - - - - - -	200	200	------	------	------	------	------
TRANSPORTATION - - - - - - -	600	200	------	100	------	------	------
WELDING - - - - - - - - - - -	100	100	------	------	------	------	------
OTHER ENGINEERING - - - - -	6,400	4,200	200	500	------	------	200
BUSINESS ADMINISTRATION - -	7,300	6,100	100	200	------	------	100
CHEMISTRY - - - - - - - - - -	1,700	1,200	------	100	------	------	------
PHYSICS - - - - - - - - - - -	4,100	2,900	100	300	------	------	200
OTHER NONENGINEERING - - -	7,000	4,000	300	800	200	100	200
NO REPORT - - - - - - - - - -	6,800	3,800	700	100	------	------	------

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

ER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND TYPES OF EMPLOYER

TYPES OF EMPLOYER

AL	PRIVATE INDUSTRY OR BUSINESS	SELF-EMPLOYED	COLLEGE OR UNIV.	JR.COL. OR TECH. INST.	SEC., ELEM., OTHER SCHOOL	NON-PROFIT ORG., OTHER THAN A SCHOOL	FEDERAL GOVT. CIVILIAN EMPLOYEE	USPHS, MILITARY SERVICE	STATE GOVT.	LOCAL GOVT.	OTHER	NO REPORT
00	211,100	11,400	20,200	900	300	5,400	24,600	4,900	5,900	4,800	4,600	14,000
00	8,400	300	1,000	------	------	500	1,600	700	------	------	200	400
00	2,000	200	900	------	------	100	1,100	100	100	------	------	200
00	800	200	100	------	------	------	100	------	------	------	------	100
00	200	------	100	------	------	------	------	------	------	------	------	------
00	300	------	100	------	------	------	------	------	------	------	------	------
00	21,400	400	1,800	100	------	300	900	100	100	100	300	1,100
00	19,600	2,900	2,900	100	------	600	5,800	1,000	4,000	2,800	1,000	2,700
00	1,200	------	100	------	------	100	200	------	------	------	------	------
00	400	100	------	------	------	------	------	100	------	------	------	------
00	36,000	1,200	1,900	100	------	700	3,400	200	200	600	800	2,000
00	13,600	300	500	------	------	400	1,400	200	------	100	200	200
00	2,800	100	1,000	------	------	100	400	100	------	------	100	200
00	3,600	200	200	------	------	100	300	------	------	------	100	300
00	1,200	------	100	------	------	100	200	------	------	------	------	100
00	1,300	100	300	------	------	100	200	------	------	------	------	100
00	600	------	------	------	------	------	------	------	------	------	------	------
00	300	------	100	------	------	------	------	100	------	------	------	------
00	2,600	300	300	------	------	------	300	------	100	------	------	300
00	200	------	100	------	------	------	------	------	------	------	------	------
00	8,500	300	800	------	------	200	800	300	100	------	100	200
00	1,000	------	------	------	------	------	100	100	------	------	------	100
00	400	------	300	------	------	------	------	------	------	------	------	100
00	42,900	2,200	3,600	200	------	800	3,500	700	300	300	700	2,200
00	9,200	200	1,200	------	------	400	600	100	------	------	100	700
00	300	------	100	------	------	------	------	------	------	------	------	------
00	2,600	300	200	------	------	------	400	------	100	------	------	500
00	700	100	100	------	------	------	100	200	------	------	------	100
00	400	------	100	------	------	------	------	100	------	------	------	------
00	5,300	300	100	------	------	------	200	100	------	------	100	200
00	700	100	300	------	------	------	200	100	200	100	100	100
00	200	------	------	------	------	------	------	------	------	------	------	------
00	200	------	100	------	------	------	------	------	100	100	------	------
00	100	------	------	------	------	------	------	------	------	------	------	------
00	4,200	200	500	------	------	200	600	200	100	100	100	200
00	6,100	100	200	------	------	100	300	200	------	------	100	200
00	1,200	------	100	------	------	------	100	------	------	------	------	100
00	2,900	100	300	------	------	200	500	------	------	------	100	100
00	4,000	300	800	200	100	200	600	200	100	200	200	200
00	3,800	700	100	------	------	------	400	------	300	200	200	1,100

L BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONN

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND LEVELS (

CURRICULA	TOTAL	HIGHEST			
		DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S
ALL CURRICULA	308,000	24,500	100	13,200	71,100
AERONAUTICAL, ASTRONAUTICAL	13,100	1,300	------	400	4,000
AGRICULTURAL	4,700	400	------	------	1,300
ARCHITECTURAL	1,300	------	------	------	200
BIOENGINEERING	400	100	------	------	100
CERAMIC	500	100	------	------	100
CHEMICAL	26,600	4,200	------	700	5,700
CIVIL	43,600	2,100	------	2,100	7,900
COMMUNICATIONS	1,600	100	------	100	500
CONSTRUCTION	600	------	------	100	200
ELECTRICAL	47,200	2,000	------	2,400	6,800
ELECTRONIC	16,800	700	------	400	5,300
ENGINEERING MECHANICS	4,700	1,500	------	100	1,600
ENGINEERING GENERAL	4,900	200	------	500	600
ENGINEERING PHYSICS	1,700	300	------	------	300
ENGINEERING SCIENCE	2,100	400	------	------	800
ENGINEERING TECHNOLOGY	800	------	------	100	100
ENVIRONMENTAL	600	100	------	------	200
GEOLOGICAL	4,200	600	------	200	900
GEOPHYSICAL	300	100	------	------	100
INDUSTRIAL	11,300	500	------	300	2,600
MARINE	1,300	------	------	------	100
MATERIALS	900	400	------	------	300
MECHANICAL	57,200	2,700	------	2,800	9,500
METALLURGICAL	12,800	2,500	------	700	3,200
MINERAL	400	------	------	------	200
MINING	4,200	100	------	900	400
NAVAL ARCHITECTURE	1,300	------	------	100	500
NUCLEAR	700	200	------	------	500
PETROLEUM	6,400	200	------	400	900
SANITARY	1,900	300	------	100	1,400
TEXTILE	200	------	------	------	------
TRANSPORTATION	600	100	------	100	300
WELDING	100	------	------	------	------
OTHER ENGINEERING	6,400	600	------	300	2,800
BUSINESS ADMINISTRATION	7,300	100	------	------	6,300
CHEMISTRY	1,700	500	------	------	300
PHYSICS	4,100	600	------	------	1,200
OTHER NONENGINEERING	7,000	1,200	100	------	3,400
NO REPORT	6,800	------	------	200	200

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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F ENGINEERS MEETING CRITERIA BY CURRICULA AND LEVELS OF HIGHEST DEGREE

TOTAL	HIGHEST DEGREE							
	DOCTORATE	PROFES-SIONAL MEDICAL	PROFES-SIONAL ENGINEER	MASTER'S	BACHELOR'S	LESS THAN BACHELOR'S DEGREE	OTHER	NO REPORT OF DEGREE
308,000	24,500	100	13,200	71,100	185,300	9,400	400	4,000
13,100	1,300	------	400	4,000	7,100	300	------	------
4,700	400	------	------	1,300	2,900	------	------	------
1,300	------	------	------	200	1,000	100	------	------
400	100	------	------	100	200	------	------	------
500	100	------	------	100	300	------	------	------
26,600	4,200	------	700	5,700	15,700	200	------	------
43,600	2,100	------	2,100	7,900	31,000	300	100	------
1,600	100	------	100	500	800	100	------	------
600	------	------	100	200	300	100	------	------
47,200	2,000	------	2,400	6,800	34,600	1,300	100	------
16,800	700	------	400	5,300	9,400	900	------	------
4,700	1,500	------	100	1,600	1,300	200	------	------
4,900	200	------	500	600	2,900	700	------	------
1,700	300	------	------	300	900	100	------	------
2,100	400	------	------	800	700	------	------	------
800	------	------	100	100	400	100	------	------
600	100	------	------	200	200	------	------	------
4,200	600	------	200	900	2,400	------	------	------
300	100	------	------	100	100	------	------	------
11,300	500	------	300	2,600	7,400	500	------	------
1,300	------	------	------	100	1,100	100	------	------
900	400	------	------	300	100	------	------	------
57,200	2,700	------	2,800	9,500	40,900	1,200	100	------
12,800	2,500	------	700	3,200	6,100	200	------	------
400	------	------	------	200	200	------	------	------
4,200	100	------	900	400	2,700	100	------	------
1,300	------	------	100	500	600	100	------	------
700	200	------	------	500	100	------	------	------
6,400	200	------	400	900	4,800	100	------	------
1,900	300	------	100	1,400	200	------	------	------
200	------	------	------	------	200	------	------	------
600	100	------	100	300	100	------	------	------
100	------	------	------	------	------	------	------	------
6,400	600	------	300	2,600	2,400	400	------	------
7,300	100	------	------	6,300	600	200	------	------
1,700	500	------	------	300	800	------	------	------
4,100	600	------	------	1,200	2,200	100	------	------
7,000	1,200	100	------	3,400	2,200	200	------	------
6,800	------	------	200	200	400	1,900	------	4,000

BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND

NUMBER OF ENGINEERS MEETING CRITERIA BY C

CURRICULA	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMI AN MATER
ALL CURRICULA - - - - -	308,000	1,600	4,100	11,7
AERONAUTICAL, ASTRONAUTICAL	13,100	100	100	[illegible]
AGRICULTURAL - - - - - - -	4,700	200	100	1
ARCHITECTURAL - - - - - - -	1,300	------	------	---
BIOENGINEERING - - - - - -	400	100	------	---
CERAMIC - - - - - - - - - -	500	------	------	1
CHEMICAL - - - - - - - - -	26,600	300	700	4,7
CIVIL - - - - - - - - - -	43,600	100	400	[illegible]
COMMUNICATIONS - - - - - -	1,600	------	------	---
CONSTRUCTION - - - - - - -	600	------	------	---
ELECTRICAL - - - - - - - -	47,200	200	400	4
ELECTRONIC - - - - - - - -	16,800	100	100	[illegible]
ENGINEERING MECHANICS - - -	4,700	------	------	[illegible]
ENGINEERING GENERAL - - - -	4,900	------	100	2
ENGINEERING PHYSICS - - - -	1,700	------	------	---
ENGINEERING SCIENCE - - - -	2,100	------	------	---
ENGINEERING TECHNOLOGY - -	800	------	------	---
ENVIRONMENTAL - - - - - - -	600	------	------	---
GEOLOGICAL - - - - - - - -	4,200	------	100	[illegible]
GEOPHYSICAL - - - - - - - -	300	------	------	---
INDUSTRIAL - - - - - - - -	11,300	------	100	
MARINE - - - - - - - - - -	1,300	------	------	---
MATERIALS - - - - - - - - -	900	------	------	
MECHANICAL - - - - - - - -	57,200	200	400	1,
METALLURGICAL - - - - - - -	12,800	------	100	1,
MINERAL - - - - - - - - - -	400	------	------	---
MINING - - - - - - - - - -	4,200	------	100	---
NAVAL ARCHITECTURE - - - -	1,300	------	------	---
NUCLEAR - - - - - - - - - -	700	------	------	---
PETROLEUM - - - - - - - - -	6,400	------	300	
SANITARY - - - - - - - - -	1,900	------	------	---
TEXTILE - - - - - - - - - -	200	------	------	---
TRANSPORTATION - - - - - -	600	------	------	---
WELDING - - - - - - - - - -	100	------	------	---
OTHER ENGINEERING - - - - -	6,400	------	100	
BUSINESS ADMINISTRATION - -	7,300	------	300	
CHEMISTRY - - - - - - - - -	1,700	------	------	
PHYSICS - - - - - - - - - -	4,100	------	------	---
OTHER NONENGINEERING - - -	7,000	100	400	
NO REPORT - - - - - - - - -	6,800	------	------	

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NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND AREAS OF TECHNOLOGY

		AREAS OF TECHNOLOGY							
	TOTAL	BIOMEDICAL	BEHAVIORAL AND SOCIAL	CHEMICAL AND MATERIALS	METALLUR- GICAL	EARTH, ATMOSPHERIC AND MARINE	ENVIRON- MENTAL AND STRUCTURAL	ELECTRO- MAGNETIC	DYNAMICS AND MECHANICS
- - -	308,000	1,600	4,100	11,700	12,100	9,900	33,700	42,800	40,100
UTICAL	13,100	100	100	300	100	100	1,100	400	5,000
- - -	4,700	200	100	100	------	200	1,100	300	600
- - -	1,300	------	------	------	------	------	500	------	100
- - -	400	100	------	------	------	------	------	------	------
- - -	500	------	------	100	100	------	------	------	------
- - -	26,600	300	700	4,700	1,000	200	1,000	300	1,500
- - -	43,600	100	400	500	200	1,400	18,200	500	2,100
- - -	1,600	------	------	------	------	------	------	900	------
- - -	600	------	------	------	------	------	200	------	------
- - -	47,200	200	400	400	200	300	700	23,600	1,400
- - -	16,800	100	100	100	------	100	100	7,800	200
- - -	4,700	------	------	100	------	------	500	100	2,000
- - -	4,900	------	100	200	100	100	400	400	800
- - -	1,700	------	------	------	------	------	100	300	100
- - -	2,100	------	------	------	100	------	100	300	300
Y - -	800	------	------	------	------	------	100	100	100
- - -	600	------	------	------	------	------	300	------	------
- - -	4,200	------	100	100	100	2,400	200	------	100
- - -	300	------	------	------	------	200	------	------	------
- - -	11,300	------	100	100	200	100	300	400	500
- - -	1,300	------	------	------	------	200	100	100	300
- - -	900	------	------	300	300	------	------	------	------
- - -	57,200	200	400	1,500	600	600	3,400	2,400	20,600
- - -	12,800	------	100	1,600	7,800	100	------	100	200
- - -	400	------	------	------	200	100	------	------	------
- - -	4,200	------	100	------	300	1,900	200	------	100
- - -	1,300	------	------	------	------	400	100	------	100
- - -	700	------	------	------	------	------	------	------	100
- - -	6,400	------	300	100	------	600	100	------	300
- - -	1,900	------	------	------	------	------	1,500	------	------
- - -	200	------	------	------	------	------	------	------	------
- - -	600	------	------	------	------	------	400	------	------
- - -	100	------	------	------	------	------	------	------	------
- - -	6,400	------	100	200	100	300	800	500	600
ON - -	7,300	------	300	400	200	100	300	700	600
- - -	1,700	------	------	300	100	------	100	100	200
- - -	4,100	------	------	------	100	100	100	1,000	300
- - -	7,000	100	400	200	200	200	600	900	600
- - -	6,800	------	------	200	100	100	900	1,200	800

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NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND AREAS OF TECHNOL

CURRICULA	AREAS OF TECHNOLOGY					
	HEAT, LIGHT AND APPLIED PHYSICS	NUCLEAR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE- MENT AND EVALUATION	INFORM AN MATHEM
ALL CURRICULA - - - - -	8,500	2,600	32,100	12,400	56,500	11,5
AERONAUTICAL, ASTRONAUTICAL	400	100	1,000	500	2,300	5
AGRICULTURAL - - - - - - - -	100	------	700	100	700	1
ARCHITECTURAL - - - - - - -	------	------	200	------	200	1
BIOENGINEERING - - - - - -	------	------	------	------	100	---
CERAMIC - - - - - - - - - -	------	------	100	------	------	---
CHEMICAL - - - - - - - - - -	1,000	400	5,600	900	5,400	8
CIVIL - - - - - - - - - - -	100	100	8,600	400	4,700	1,2
COMMUNICATIONS - - - - - - -	100	------	------	100	300	1
CONSTRUCTION - - - - - - - -	------	------	100	------	200	---
ELECTRICAL - - - - - - - - -	900	200	2,000	3,600	7,400	2,
ELECTRONIC - - - - - - - - -	500	100	800	1,500	3,100	1,5
ENGINEERING MECHANICS - - -	200	------	300	100	600	3
ENGINEERING GENERAL - - - -	100	------	500	400	1,100	4
ENGINEERING PHYSICS - - - -	200	------	200	100	200	1
ENGINEERING SCIENCE - - - -	100	------	100	100	400	1
ENGINEERING TECHNOLOGY - -	------	------	100	------	200	1
ENVIRONMENTAL - - - - - - -	------	------	------	------	------	---
GEOLOGICAL - - - - - - - - -	------	------	400	------	300	---
GEOPHYSICAL - - - - - - - -	------	------	------	------	------	---
INDUSTRIAL - - - - - - - - -	100	------	500	300	7,200	6
MARINE - - - - - - - - - - -	------	100	100	------	200	---
MATERIALS - - - - - - - - - -	------	------	------	------	------	---
MECHANICAL - - - - - - - - -	3,000	800	4,100	2,400	11,100	1,5
METALLURGICAL - - - - - - -	200	100	500	100	800	---
MINERAL - - - - - - - - - - -	------	------	------	------	------	---
MINING - - - - - - - - - - -	------	------	400	------	400	---
NAVAL ARCHITECTURE - - - -	------	------	200	------	200	1
NUCLEAR - - - - - - - - - - -	------	300	------	------	100	---
PETROLEUM - - - - - - - - -	------	------	2,300	100	1,500	2
SANITARY - - - - - - - - - -	------	------	100	------	100	---
TEXTILE - - - - - - - - - - -	------	------	------	------	100	---
TRANSPORTATION - - - - - - -	------	------	------	------	------	---
WELDING - - - - - - - - - - -	------	------	------	------	------	---
OTHER ENGINEERING - - - - -	100	------	700	400	1,600	4
BUSINESS ADMINISTRATION - -	100	------	600	200	2,400	4
CHEMISTRY - - - - - - - - - -	100	------	100	100	300	---
PHYSICS - - - - - - - - - - -	500	100	200	400	700	2
OTHER NONENGINEERING - - -	100	------	600	300	1,700	5
NO REPORT - - - - - - - - - -	100	------	800	200	900	1

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

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TING CRITERIA BY CURRICULA AND AREAS OF TECHNOLOGY--CONTINUED

	AREAS OF TECHNOLOGY					
AR	ENGINEERING PROCESSES AND APPLICATIONS	AUTOMATION AND CONTROL	WORK MANAGE-MENT AND EVALUATION	INFORMATION AND MATHEMATICS	OTHER	NO REPORT
0	32,100	12,400	56,500	11,500	9,700	18,700
00	1,000	500	2,300	500	500	600
--	700	100	700	100	300	300
--	200	------	200	100	------	100
--	------	------	100	------	------	------
--	100	------	------	------	------	------
00	5,600	900	5,400	800	1,200	1,600
00	8,600	400	4,700	1,200	1,400	3,500
--	------	100	300	100	------	100
---	100	------	200	------	------	------
200	2,000	3,600	7,400	2,300	900	2,700
100	800	1,500	3,100	1,500	300	400
---	300	100	600	300	200	200
---	500	400	1,100	200	200	400
---	200	100	200	100	------	100
---	100	100	400	100	100	100
---	100	------	200	100	------	------
---	------	------	------	------	------	------
---	400	------	300	------	100	400
---	------	------	------	------	------	------
---	500	300	7,200	600	300	400
100	100	------	200	------	------	100
----	------	------	------	------	------	100
800	4,100	2,400	11,100	1,500	1,600	3,000
100	500	100	800	------	200	900
----	------	------	------	------	------	------
----	400	------	400	------	100	600
----	200	------	200	100	100	100
300	------	------	100	------	------	------
-----	2,300	100	1,500	200	600	300
-----	100	------	100	------	------	100
-----	------	------	100	------	------	------
-----	------	------	------	------	------	------
-----	------	------	------	------	------	------
-----	700	400	1,600	400	300	300
-----	600	200	2,400	400	500	300
-----	100	100	300	------	------	100
100	200	400	700	200	100	200
-----	600	300	1,700	500	500	300
-----	800	200	900	100	100	1,100

OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL,

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND PRODUCTS

CURRICULA	TOTAL	PRODUCTS AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMIC & ALL PRODUC
ALL CURRICULA	308,000	4,000	33,000	2,100	19,5
AERONAUTICAL, ASTRONAUTICAL	13,100	100	8,500	------	1
AGRICULTURAL	4,700	[illegible],400	100	------	1
ARCHITECTURAL	1,300	------	100	------	----
BIOENGINEERING	400	------	------	------	----
CERAMIC	500	------	------	200	----
CHEMICAL	26,600	600	1,100	200	11,6
CIVIL	43,600	300	1,100	300	4
COMMUNICATIONS	1,600	------	100	------	----
CONSTRUCTION	600	------	------	------	----
ELECTRICAL	47,200	200	3,000	100	7
ELECTRONIC	16,800	------	2,100	------	1
ENGINEERING MECHANICS	4,700	------	1,100	------	1
ENGINEERING GENERAL	4,900	100	700	------	2
ENGINEERING PHYSICS	1,700	------	300	------	----
ENGINEERING SCIENCE	2,100	------	400	------	1
ENGINEERING TECHNOLOGY	800	------	100	------	1
ENVIRONMENTAL	600	------	------	------	----
GEOLOGICAL	4,200	------	100	------	1
GEOPHYSICAL	300	------	100	------	----
INDUSTRIAL	11,300	300	1,000	200	7
MARINE	1,300	------	100	------	----
MATERIALS	900	------	100	------	----
MECHANICAL	57,200	600	8,200	400	2,6
METALLURGICAL	12,800	------	900	200	3
MINERAL	400	------	------	------	----
MINING	4,200	------	------	------	1
NAVAL ARCHITECTURE	1,300	------	------	------	----
NUCLEAR	700	------	100	------	----
PETROLEUM	6,400	------	------	------	1
SANITARY	1,900	------	------	------	----
TEXTILE	200	------	------	------	----
TRANSPORTATION	600	------	------	------	----
WELDING	100	------	------	------	----
OTHER ENGINEERING	6,400	100	700	------	3
BUSINESS ADMINISTRATION	7,300	100	800	100	9
CHEMISTRY	1,700	------	200	------	4
PHYSICS	4,100	------	700	------	1
OTHER NONENGINEERING	7,000	100	800	------	2
NO REPORT	6,800	100	400	------	1

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R OF ENGINEERS MEETING CRITERIA BY CURRICULA AND PRODUCTS OR SERVICES

PRODUCTS OR SERVICES

	TOTAL	AGRICUL-TURE & FOOD	AIRCRAFT & SPACE	CERAMICS	CHEMICALS & ALLIED PRODUCTS	COMMU-NICATIONS	COMPUTERS	CONSTRUC-TION & CIVIL ENGR	EDUCA-TIONAL, INFOR-MATION SERVICES
- - - - - -	308,000	4,000	33,000	2,100	19,500	7,700	11,000	45,900	14,600
- - - - - -	13,100	100	8,500	------	100	100	300	300	500
- - - - - -	4,700	1,400	100	------	100	------	------	800	300
- - - - - -	1,300	------	100	------	------	------	------	700	100
- - - - - -	400	------	------	------	------	------	------	------	100
- - - - - -	500	------	------	200	------	------	------	------	------
- - - - - -	26,600	600	1,100	200	11,600	100	500	1,000	1,300
- - - - - -	43,600	300	1,100	300	400	100	300	29,700	1,900
- - - - - -	1,600	------	100	------	------	700	100	------	100
- - - - - -	600	------	------	------	------	------	------	400	------
- - - - - -	47,200	200	3,000	100	700	3,000	3,000	1,300	1,500
- - - - - -	16,800	------	2,100	------	100	1,500	2,400	100	300
- - - - - -	4,700	------	1,100	------	100	100	100	300	800
- - - - - -	4,900	100	700	------	200	100	200	500	100
- - - - - -	1,700	------	300	------	------	100	100	100	100
- - - - - -	2,100	------	400	------	100	100	100	100	200
- - - - - -	800	------	100	------	100	------	100	------	------
- - - - - -	600	------	------	------	------	------	------	200	100
- - - - - -	4,200	------	100	------	100	------	------	400	200
- - - - - -	300	------	100	------	------	------	------	------	------
- - - - - -	11,300	300	1,000	200	700	300	700	400	800
- - - - - -	1,300	------	100	------	------	------	------	100	------
- - - - - -	900	------	100	------	------	------	------	------	100
- - - - - -	57,200	600	8,200	400	2,600	400	1,100	3,500	2,900
- - - - - -	12,800	------	900	200	300	100	100	100	600
- - - - - -	400	------	------	------	------	------	------	------	------
- - - - - -	4,200	------	------	------	100	------	------	300	100
- - - - - -	1,300	------	------	------	------	------	------	------	------
- - - - - -	700	------	100	------	------	------	------	------	100
- - - - - -	6,400	------	------	------	100	------	100	100	100
- - - - - -	1,900	------	------	------	------	------	------	1,000	200
- - - - - -	200	------	------	------	------	------	------	------	------
- - - - - -	600	------	------	------	------	------	------	300	100
- - - - - -	100	------	------	------	------	------	------	------	------
- - - - - -	6,400	100	700	------	300	100	300	1,100	400
- - - - - -	7,300	100	800	100	900	200	400	500	100
- - - - - -	1,700	------	200	------	400	------	------	100	100
- - - - - -	4,100	------	700	------	100	200	300	100	200
- - - - - -	7,000	100	800	------	200	300	300	800	1,000
- - - - - -	6,800	100	400	------	100	200	100	1,600	------

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NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND PRODUCTS OR S

CURRICULA	PRODUCTS OR S				
	ELEC- TRICAL EQUIP- MENT, SERVICES	ELEC- TRONIC EQUIP- MENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARI TRAN PORTA
ALL CURRICULA	19,200	23,000	2,800	28,400	4,8
AERONAUTICAL, ASTRONAUTICAL	200	300	100	500	2
AGRICULTURAL	100	------	------	1,200	----
ARCHITECTURAL	------	------	------	100	----
BIOENGINEERING	------	------	------	------	----
CERAMIC	------	------	------	------	----
CHEMICAL	400	400	200	1,100	1
CIVIL	300	100	100	800	3
COMMUNICATIONS	100	300	------	------	----
CONSTRUCTION	------	------	------	------	----
ELECTRICAL	11,200	7,300	400	1,700	4
ELECTRONIC	1,000	7,200	300	200	1
ENGINEERING MECHANICS	100	200	100	700	1
ENGINEERING GENERAL	300	300	100	700	1
ENGINEERING PHYSICS	100	500	100	100	----
ENGINEERING SCIENCE	100	200	------	100	----
ENGINEERING TECHNOLOGY	------	100	------	100	----
ENVIRONMENTAL	------	------	------	200	----
GEOLOGICAL	------	------	------	100	----
GEOPHYSICAL	------	------	------	------	----
INDUSTRIAL	600	500	100	1,100	1
MARINE	------	------	------	300	5
MATERIALS	------	100	------	------	----
MECHANICAL	2,400	1,800	700	15,400	1,1
METALLURGICAL	200	300	100	600	1
MINERAL	------	------	------	------	----
MINING	------	------	------	300	----
NAVAL ARCHITECTURE	------	------	------	------	1,0
NUCLEAR	------	------	------	100	----
PETROLEUM	------	------	------	100	----
SANITARY	------	------	------	------	----
TEXTILE	------	------	------	------	----
TRANSPORTATION	------	------	------	------	----
WELDING	------	------	------	------	----
OTHER ENGINEERING	300	500	100	700	1
BUSINESS ADMINISTRATION	500	500	100	600	1
CHEMISTRY	100	100	------	100	----
PHYSICS	300	1,200	100	200	----
OTHER NONENGINEERING	200	500	100	400	1
NO REPORT	500	300	100	1,000	1

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NGINEERS MEETING CRITERIA BY CURRICULA AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

	ELECTRICAL EQUIPMENT, SERVICES	ELECTRONIC EQUIPMENT, SERVICES	LAB., SCI., PHOTO., OPTICAL EQUIPMENT	MACHINERY, MECHANICAL EQUIPMENT	MARINE TRANSPORTATION	MEDICAL, HEALTH SERVICES	METALS, BASIC (EXCEPT MINING)	METAL FABRICATED PRODUCTS	MINING
- - - -	19,200	23,000	2,800	28,400	4,800	1,300	12,600	6,300	5,900
- - - -	200	300	100	500	200	------	200	100	------
- - - -	100	------	------	1,200	------	------	100	------	------
- - - -	------	------	------	100	------	------	------	100	------
- - - -	------	------	------	------	------	100	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	400	400	200	1,100	100	100	1,200	300	200
- - - -	300	100	100	800	300	------	300	700	300
- - - -	100	300	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	11,200	7,300	400	1,700	400	100	500	300	200
- - - -	1,000	7,200	300	200	100	100	------	------	------
- - - -	100	200	100	700	100	------	------	100	------
- - - -	300	300	100	700	100	------	200	100	------
- - - -	100	500	100	100	------	------	------	------	------
- - - -	100	200	------	100	------	------	100	------	------
- - - -	------	100	------	100	------	------	------	------	------
- - - -	------	------	------	200	------	------	------	------	------
- - - -	------	------	------	100	------	------	100	------	1,400
- - - -	------	------	------	------	------	------	------	------	100
- - - -	600	500	100	1,100	100	200	600	600	100
- - - -	------	------	------	300	500	------	------	------	------
- - - -	------	100	------	------	------	------	300	------	------
- - - -	2,400	1,800	700	15,400	1,100	200	1,200	2,100	200
- - - -	200	300	100	600	100	------	6,300	800	400
- - - -	------	------	------	------	------	------	100	------	200
- - - -	------	------	------	300	------	------	200	------	2,300
- - - -	------	------	------	------	1,000	------	------	------	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	100	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	------	------	------	------	------	------	------	------	------
- - - -	300	500	100	700	100	------	200	100	100
- - - -	500	500	100	600	100	------	300	200	100
- - - -	100	100	------	100	------	------	100	------	------
- - - -	300	1,200	100	200	------	------	100	------	------
- - - -	200	500	100	400	100	100	200	100	------
- - - -	500	300	100	1,000	100	------	100	200	100

NATIONAL REGISTER OF SCIENTIFIC AND

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICUL

PO

CURRICULA	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLE
ALL CURRICULA	2,500	5,200	15,5
AERONAUTICAL, ASTRONAUTICAL	100	500	2
AGRICULTURAL	------	------	1
ARCHITECTURAL	------	------	----
BIOENGINEERING	------	------	----
CERAMIC	------	------	----
CHEMICAL	100	300	2,9
CIVIL	200	200	8
COMMUNICATIONS	------	------	----
CONSTRUCTION	------	------	----
ELECTRICAL	200	800	6
ELECTRONIC	------	500	1
ENGINEERING MECHANICS	100	100	1
ENGINEERING GENERAL	100	100	2
ENGINEERING PHYSICS	------	------	1
ENGINEERING SCIENCE	------	100	----
ENGINEERING TECHNOLOGY	------	------	----
ENVIRONMENTAL	------	------	----
GEOLOGICAL	------	------	1,1
GEOPHYSICAL	------	------	----
INDUSTRIAL	300	200	2
MARINE	------	------	----
MATERIALS	------	------	----
MECHANICAL	900	1,500	2,2
METALLURGICAL	200	100	1
MINERAL	------	------	----
MINING	------	------	[illegible]
NAVAL ARCHITECTURE	------	------	----
NUCLEAR	------	------	----
PETROLEUM	------	------	5,
SANITARY	------	------	----
TEXTILE	------	------	----
TRANSPORTATION	------	------	----
WELDING	------	------	----
OTHER ENGINEERING	100	100	[illegible]
BUSINESS ADMINISTRATION	100	200	
CHEMISTRY	------	------	
PHYSICS	------	200	
OTHER NONENGINEERING	------	100	
NO REPORT	------	100	

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

NUMBER OF ENGINEERS MEETING CRITERIA BY CURRICULA AND PRODUCTS OR SERVICES--CONTINUED

PRODUCTS OR SERVICES

RICULA	MOTOR VEHICLE TRANS-PORTATION	ORDNANCE	PETROLEUM	RAILWAY, RAPID TRANSIT	UTILITIES	OTHER PRODUCTS, SERVICES	NO REPORT OF PRODUCTS OR SERVICES
	2,500	5,200	15,500	1,500	14,700	11,300	15,200
AUTICAL	100	500	200	------	100	300	500
	------	------	100	------	200	100	300
	------	------	------	------	------	------	100
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	100	300	2,900	------	400	1,200	1,200
	200	200	800	300	1,300	800	2,900
	------	------	------	------	------	------	100
	------	------	------	------	------	------	------
	200	800	600	200	6,900	1,100	2,200
	------	500	100	------	200	300	300
CS	100	100	100	------	100	200	200
	100	100	200	------	200	300	300
	------	------	100	------	------	------	100
	------	100	------	------	------	100	100
OGY	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	------	------	1,100	------	100	100	300
	------	------	------	------	------	------	------
	300	200	200	100	200	1,500	300
	------	------	------	------	100	------	100
	------	------	------	------	------	------	100
	900	1,500	2,200	400	3,000	2,200	2,300
	200	100	100	------	100	200	800
	------	------	------	------	------	------	------
	------	------	200	------	------	100	500
	------	------	------	------	------	------	100
	------	------	------	------	------	100	------
	------	------	5,400	------	100	100	200
	------	------	------	------	300	100	100
	------	------	------	------	------	100	------
	------	------	------	------	------	------	------
	------	------	------	------	------	------	------
	100	100	200	------	200	400	300
ATION	100	200	300	------	300	700	200
	------	------	200	------	------	100	100
	------	200	100	------	100	100	100
NG	------	100	200	------	300	700	300
	------	100	200	100	400	200	1,100

NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 196

DISTRIBUTION OF AGE AT TIME OF RECEIVING DEGREE, BY LEVEL OF DEGREE, FOR ENGINE

AGE AT TIME OF RECEIVING DEGREE	TOTAL REPORTING B.S.	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	LEVEL OF DEGREE		
			B.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT M.S.
ALL AGES	274,900	270,100	182,200	66,200	66,200
15	---	---	---	---	---
16	---	---	---	---	---
17	100	100	---	---	---
18	200	200	100	---	---
19	800	800	400	200	---
20	5,100	5,100	2,600	1,500	100
21	25,500	25,500	13,400	8,400	300
22	66,800	66,800	39,500	19,700	1,800
23	54,100	54,100	36,300	13,500	5,100
24	30,200	30,200	21,600	6,800	7,000
25	21,300	21,300	16,100	4,300	6,500
26	16,500	16,500	12,500	3,200	6,000
27	12,600	12,600	9,700	2,300	5,600
28	10,000	10,000	7,900	1,900	5,100
29	7,000	7,000	5,700	1,200	4,400
30	4,800	4,800	4,000	700	3,800
31	3,200	3,200	2,600	600	3,400
32	2,500	2,500	2,100	300	2,800
33	1,900	1,900	1,600	300	2,200
34	1,400	1,400	1,100	300	1,800
35	1,300	1,300	1,000	300	1,600
36	900	900	800	100	1,400
37	800	800	700	200	1,200
38	600	600	500	100	1,000
39	400	400	300	100	900
40	400	400	400	---	800
41	300	300	200	---	600
42	300	300	200	100	400
43	200	200	200	---	500
44	100	100	100	---	400
45	200	200	100	---	200
46	100	100	100	---	300
47	100	100	100	---	200
48	---	---	---	---	200
49	---	---	---	---	100
50	100	100	100	---	100
51	---	---	---	---	100
52	---	---	---	---	100
53	100	100	---	---	100
54	---	---	---	---	100
55	---	---	---	---	100
56	---	---	---	---	---

ATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

AT TIME OF RECEIVING DEGREE, BY LEVEL OF DEGREE, FOR ENGINEERS MEETING CRITERIA

TOTAL PORTING B.S.	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	LEVEL OF DEGREE: B.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT M.S.	PH.D. HIGHEST DEGREE, AGE AT B.S.	PH.D. HIGHEST DEGREE, AGE AT PH.D.	NO REPORT OF BIRTH YEAR OR YEAR OF DEGREE
4,900	270,100	182,200	66,200	66,200	21,600	21,600	4,800
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100	100	---	---	---	---	---	---
200	200	100	---	---	---	---	---
800	800	400	200	---	200	---	---
5,100	5,100	2,600	1,500	100	1,000	---	---
5,500	25,500	13,400	8,400	300	3,700	---	---
6,800	66,800	39,500	19,700	1,800	7,600	---	---
4,100	54,100	36,300	13,500	5,100	4,300	100	---
0,200	30,200	21,600	6,800	7,000	1,800	500	---
1,300	21,300	16,100	4,300	6,500	1,000	1,200	---
6,500	16,500	12,500	3,200	6,000	700	1,900	---
2,600	12,600	9,700	2,300	5,600	600	2,400	---
0,000	10,000	7,900	1,900	5,100	200	2,400	---
7,000	7,000	5,700	1,200	4,400	100	2,100	---
4,800	4,800	4,000	700	3,800	100	1,700	---
3,200	3,200	2,600	600	3,400	100	1,800	---
2,500	2,500	2,100	300	2,800	100	1,400	---
1,900	1,900	1,600	300	2,200	---	1,100	---
1,400	1,400	1,100	300	1,800	---	900	---
1,300	1,300	1,000	300	1,600	---	700	---
900	900	800	100	1,400	---	600	---
800	800	700	200	1,200	---	400	---
600	600	500	100	1,000	---	400	---
400	400	300	100	900	---	400	---
400	400	400	---	800	---	300	---
300	300	200	---	600	---	200	---
300	300	200	100	400	---	200	---
200	200	200	---	500	---	200	---
100	100	100	---	400	---	100	---
200	200	100	---	200	---	100	---
100	100	100	---	300	---	100	---
100	100	100	---	200	---	---	---
---	---	---	---	200	---	100	---
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100	100	100	---	100	---	100	---
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NATIONAL REGISTER OF SCIENTIFIC AN

DISTRIBUTION OF AGE AT TIME OF RECEIVING DEGREE, BY LEVEL

AGE AT TIME OF RECEIVING DEGREE	TOTAL REPORTING B.S.	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	B.S. HIGHEST DEGREE, AGE AT B.S
ALL AGES, CONTINUED			
57 -	---	---	---
58 -	---	---	---
59 -	---	---	---
60 -	---	---	---
61 -	---	---	---
62 -	---	---	---
63 -	---	---	---
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67 -	---	---	---
68 -	---	---	---
69 -	---	---	---
70 -	---	---	---
71 -	---	---	---
72 -	---	---	---
73 -	---	---	---
74 -	---	---	---
75 -	---	---	---
76 -	---	---	---
77 -	---	---	---
78 -	---	---	---
79 -	---	---	---
80 OR LATER - - - - - - - - - - - -	---	---	---
NO REPORT - - - - - - - - - - - -	4,800	---	---

DISTRIBUTION OF AGE AT TIME OF RECEIVING DEGREE

LOWER DECILE - - - - - - -		21	22
LOWER QUARTILE - - - - - -		22	22
MEDIAN - - - - - - - - - -		23	23
UPPER QUARTILE - - - - - -		25	26
UPPER DECILE - - - - - - -		28	29

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

;E AT TIME OF RECEIVING DEGREE, BY LEVEL OF DEGREE, FOR ENGINEERS MEETING CRITERIA--CONTINUED

	TOTAL REPORTING B.S.	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	LEVEL OF DEGREE: B.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT B.S.	M.S. HIGHEST DEGREE, AGE AT M.S.	PH.D. HIGHEST DEGREE, AGE AT B.S.	PH.D. HIGHEST DEGREE, AGE AT PH.D.	NO REPORT OF BIRTH YEAR OR YEAR OF DEGREE
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- -	4,800	---	---	---	---	---	---	4,80C

OF RECEIVING DEGREE

- -		21	22	21	23	21	26	
- -		22	22	22	25	22	27	
- -		23	23	23	28	22	30	
- -		25	26	24	32	23	33	
- -		28	29	27	37	25	38	

TOTAL BECAUSE OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 196

DISTRIBUTION OF AGE AT TIME OF RECEIVING BACHELOR'S, MASTER'S, AND DOCTO
BY PRESENT AGE, FOR ENGINEERS MEETING CRITERIA

	TOTAL	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	PRESENT LESS THAN 30	30-39
DISTRIBUTION OF AGE AT TIME OF RECEIVING BACHELOR'S DEGREE				
TOTAL	274,900	270,400	35,000	82,300
TOTAL NOT REPORTING AGE AND YEAR OF DEGREE	4,500	---	---	---
TOTAL REPORTING AGE AND YEAR OF DEGREE	270,400	270,400	35,000	82,300
LOWER DECILE		21	22	22
LOWER QUARTILE		22	22	22
MEDIAN		23	22	23
UPPER QUARTILE		25	23	25
UPPER DECILE		28	24	28
DISTRIBUTION OF AGE AT TIME OF RECEIVING MASTER'S DEGREE				
TOTAL	90,500	89,000	11,200	32,100
TOTAL NOT REPORTING AGE AND YEAR OF DEGREE	1,600	---	---	---
TOTAL REPORTING AGE AND YEAR OF DEGREE	89,000	89,000	11,200	32,100
LOWER DECILE		23	23	23
LOWER QUARTILE		24	24	25
MEDIAN		27	24	27
UPPER QUARTILE		31	26	30
UPPER DECILE		36	27	32
DISTRIBUTION OF AGE AT TIME OF RECEIVING DOCTORATE DEGREE				
TOTAL	24,500	24,100	1,800	10,000
TOTAL NOT REPORTING AGE AND YEAR OF DEGREE	300	---	---	---
TOTAL REPORTING AGE AND YEAR OF DEGREE	24,100	24,100	1,800	10,000
LOWER DECILE		26	25	26
LOWER QUARTILE		27	26	27
MEDIAN		30	27	29
UPPER QUARTILE		33	28	32
UPPER DECILE		38	28	34

NOTE -- GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING.

ISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

IME OF RECEIVING BACHELOR'S, MASTER'S, AND DOCTORATE DEGREES,
RESENT AGE, FOR ENGINEERS MEETING CRITERIA

		PRESENT AGE				
L	TOTAL REPORTING BIRTH YEAR & YEAR OF DEGREE	LESS THAN 30	30-39	40-49	50 AND HIGHER	NO REPORT OF BIRTH YEAR OR YEAR OF DEGREE
)0	270,400	35,000	82,300	90,000	63,000	4,500
00	---	---	---	---	---	4,500
00	270,400	35,000	82,300	90,000	63,000	---
	21	22	22	21	21	
	22	22	22	22	22	
	23	22	23	24	23	
	25	23	25	27	25	
	28	24	28	29	31	
500	89,000	11,200	32,100	28,400	17,300	1,600
600	---	---	---	---	---	1,600
000	89,000	11,200	32,100	28,400	17,300	---
	23	23	23	24	23	
	24	24	25	26	24	
	27	24	27	28	28	
	31	26	30	33	35	
	36	27	32	39	43	
,500	24,100	1,800	10,000	7,200	5,200	300
300	---	---	---	---	---	300
,100	24,100	1,800	10,000	7,200	5.200	---
	26	25	26	26	25	
	27	26	27	28	27	
	30	27	29	31	31	
	33	28	32	36	39	
	38	28	34	40	45	

OF ROUNDING.

NATIONAL REGISTER OF SCIENTIFIC AND TECHNIC

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA W
IN ENGINEERING AND AN ADVANCED DEGREE IN A N

GENERAL CHARACTERISTICS	TOTAL	BUSINESS ADMINISTRATION	CH
TOTAL ENGINEERS REPORTING	11,100	6,000	
HIGHEST DEGREE			
DOCTORATE	1,600	100	
PROFESSIONAL MEDICAL	100	------	
PROFESSIONAL ENGINEER	------	------	
MASTER'S	9,400	5,900	
BACHELOR'S	------	------	
LESS THAN BACHELOR'S	------	------	
OTHER	------	------	
NO REPORT	------	------	
CURRICULUM OF BACHELOR'S DEGREE			
AEROSPACE	300	200	
CHEMICAL	1,800	1,000	
CIVIL	1,400	600	
ELECTRICAL	2,400	1,100	
GENERAL	1,700	1,000	
MECHANICAL	2,400	1,500	
METALLURGICAL	300	200	
MINERAL	300	200	
OTHER	400	200	
NO REPORT	------	------	
PROFESSIONAL IDENTIFICATION			
ENGINEER	6,700	3,700	
ARCHITECT	------	------	
PHYSICIST	300	------	
CHEMIST	100	------	
GEOLOGIST	------	------	
MATHEMATICIAN	100	------	
METALLURGIST	100	100	
TECHNICIAN	------	------	
OTHER	3,400	2,100	
NO REPORT	300	200	

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA WITH A BACHELOR'S DEGREE IN ENGINEERING AND AN ADVANCED DEGREE IN A NONENGINEERING FIELD

ACTERISTICS	TOTAL	NONENGINEERING FIELDS				
		BUSINESS ADMINISTRATION	CHEMISTRY	PHYSICS	MEDICINE	OTHER NON-ENGINEERING FIELDS
NG	11,100	6,000	400	900	100	3,700
	1,600	100	300	300	------	1,000
AL	100	------	------	------	100	------
EER	------	------	------	------	------	------
	9,400	5,900	200	600	------	2,700
	------	------	------	------	------	------
'S	------	------	------	------	------	------
	------	------	------	------	------	------
	------	------	------	------	------	------
S DEGREE						
	300	200	------	------	------	100
	1,800	1,000	400	100	------	400
	1,400	600	------	100	------	700
	2,400	1,100	------	400	------	800
	1,700	1,000	------	200	------	500
	2,400	1,500	------	100	------	800
	300	200	------	------	------	100
	300	200	------	------	------	100
	400	200	------	------	------	200
	------	------	------	------	------	------
TION						
	6,700	3,700	300	500	------	2,200
	------	------	------	------	------	------
	300	------	------	300	------	------
	100	------	100	------	------	------
	------	------	------	------	------	------
	100	------	------	------	------	100
	100	100	------	------	------	------
	------	------	------	------	------	------
	3,400	2,100	------	100	100	1,200
	300	200	------	------	------	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERS

CHARACTERISTICS OF ENGINEERS MEETING CRITERIA WITH A B
IN ENGINEERING AND AN ADVANCED DEGREE IN A NONENGINEERIN

NO

GENERAL CHARACTERISTICS	TOTAL	BUSINESS ADMINISTRATION	CHEMISTRY
TYPE OF EMPLOYER			
PRIV.INDUSTRY,BUSINESS	7,800	5,000	300
SELF-EMPLOYED	300	100	------
COLLEGE,UNIVERSITY	900	100	100
JR.COLLEGE,TECH.INST.	200	------	------
SEC.,ELEM.,OTHER SCHOOL	100	------	------
NONPROFIT ORGANIZATION	300	100	------
FEDERAL GOVERNMENT	600	200	------
USPHS,MILITARY SERVICE	300	200	------
STATE GOVERNMENT	100	------	------
LOCAL GOVERNMENT	200	------	------
OTHER	200	100	------
NO REPORT	300	100	------
FUNCTIONS			
DESIGN	900	400	------
DEVELOPMENT	900	500	100
RESEARCH	800	200	100
PRODUCTION	1,700	1,300	------
CONTROL	5,100	3,200	100
TEACHING	800	100	------
OTHER	400	200	------
NO REPORT	400	200	------

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFIN
ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANI
(COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGI
ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICA
(METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, P
BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERI
PHYSICS, OTHER NONENGINEERING).

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

HARACTERISTICS OF ENGINEERS MEETING CRITERIA WITH A BACHELOR'S DEGREE
ENGINEERING AND AN ADVANCED DEGREE IN A NONENGINEERING FIELD--CONTINUED

S	TOTAL	NONENGINEERING FIELDS				
		BUSINESS ADMINISTRATION	CHEMISTRY	PHYSICS	MEDICINE	OTHER NON-ENGINEERING FIELDS
- - - - - -	7,800	5,000	300	500	------	1,900
- - - - - -	300	100	------	------	------	200
- - - - - -	900	100	100	100	------	500
- - - - - -	200	------	------	------	------	100
- - - - - -	100	------	------	------	------	100
- - - - - -	300	100	------	------	------	100
- - - - - -	600	200	------	100	------	300
- - - - - -	300	200	------	------	------	100
- - - - - -	100	------	------	------	------	------
- - - - - -	200	------	------	------	------	100
- - - - - -	200	100	------	------	------	100
- - - - - -	300	100	------	------	------	100
- - - - - -	900	400	------	100	------	300
- - - - - -	900	500	100	100	------	200
- - - - - -	800	200	100	300	------	200
- - - - - -	1,700	1,300	------	-------	------	400
- - - - - -	5,100	3,200	100	200	------	1,600
- - - - - -	800	100	------	100	------	600
- - - - - -	400	200	------	-------	------	200
- - - - - -	400	200	------	100	------	200

L BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
CHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
AL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
NEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATION, CHEMISTRY,
RING).

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA

GENERAL CHARACTERISTICS	TOTAL FOREIGN BORN	CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND					
		FOREIGN CITIZENSHIP			UNITED STATE		
					FOREIGN SECONDARY EDUCATION		
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE
TOTAL ENGINEERS REPORTING - - - -	23,100	3,000	1,100	800	4,100	3,800	3,000
HIGHEST DEGREE							
DOCTORATE - - - - - - - - - -	4,700	1,000	100	300	1,000	600	800
PROFESSIONAL MEDICAL - - - -	------	------	------	------	------	------	------
PROFESSIONAL ENGINEER - - -	1,400	------	------	100	100	100	600
MASTER'S - - - - - - - - - - -	7,300	1,300	400	300	1,300	1,200	900
BACHELOR'S - - - - - - - - - -	8,500	700	600	------	1,700	1,800	------
LESS THAN BACHELOR'S - - - -	500	------	------	------	------	------	300
OTHER - - - - - - - - - - -	300	------	------	100	------	------	300
NO REPORT - - - - - - - - - -	300	------	------	------	------	------	100
CURRICULUM OF BACHELOR'S DEGREE							
AEROSPACE - - - - - - - - - -	800	------	100	------	200	200	------
CHEMICAL - - - - - - - - - - -	1,600	200	100	------	400	300	------
CIVIL - - - - - - - - - - -	3,400	600	300	------	700	800	------
ELECTRICAL - - - - - - - - - -	3,800	400	------	------	900	800	------
GENERAL - - - - - - - - - -	1,400	100	100	------	400	300	------
MECHANICAL - - - - - - - - - -	4,500	900	400	------	800	1,000	------
METALLURGICAL - - - - - - - -	800	300	100	------	200	100	------
MINERAL - - - - - - - - - - -	700	200	100	------	100	200	------
OTHER - - - - - - - - - - - -	1,300	200	100	------	400	200	------
NO REPORT - - - - - - - - - -	4,800	------	------	800	100	------	2,900
STUDENT STATUS							
FULL-TIME - - - - - - - - - -	400	200	100	------	------	100	------
PART-TIME - - - - - - - - - -	1,000	200	100	------	100	200	------
NO REPORT - - - - - - - - - -	21,700	2,600	1,000	800	3,900	3,500	3,000
PROFESSIONAL EMPLOYMENT STATUS							
PROFESSIONALLY EMPLOYED - -	21,900	2,900	1,100	800	3,900	3,700	2,700
SEEKING EMPLOYMENT - - - - -	300	100	100	------	100	------	------
NOT SEEKING EMPLOYMENT - - -	800	100	------	------	100	100	200
NO REPORT - - - - - - - - - -	100	------	------	------	------	------	------

NAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

RACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA

L GN RN	CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND PLACE OF BACHELOR'S DEGREE									
	FOREIGN CITIZENSHIP			UNITED STATES CITIZENSHIP						NO REPORT OF CITIZEN-SHIP
				FOREIGN SECONDARY EDUCATION			SECONDARY EDUCATION FROM U.S. OR NOT REPORTED			
	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	
100	3,000	1,100	800	4,100	3,800	3,000	200	6,000	800	300
700	1,000	100	300	1,000	600	800	100	600	------	100
---	------	------	------	------	------	------	------	------	------	------
400	------	------	100	100	100	600	------	100	300	------
300	1,300	400	300	1,300	1,200	900	100	1,700	100	100
500	700	600	------	1,700	1,800	------	------	3,500	------	100
500	------	------	------	------	------	300	------	------	200	------
300	------	------	100	------	------	300	------	------	------	------
300	------	------	------	------	------	100	------	------	100	------
800	------	100	------	200	200	------	------	300	------	------
,600	200	100	------	400	300	------	------	600	------	------
,400	600	300	------	700	800	------	------	1,000	------	------
,800	400	------	------	900	800	------	------	1,600	------	------
,400	100	100	------	400	300	------	------	500	------	------
,500	900	400	------	800	1,000	------	------	1,400	------	------
800	300	100	------	200	100	------	------	200	------	------
700	200	100	------	100	200	------	------	100	------	------
,300	200	100	------	400	200	------	------	300	------	------
,800	------	------	800	100	------	2,900	------	------	700	100
400	200	100	------	------	100	------	------	------	------	------
,000	200	100	------	100	200	------	------	200	------	------
,700	2,600	1,000	800	3,900	3,500	3,000	200	5,700	700	300
,900	2,900	1,100	800	3,900	3,700	2,700	200	5,800	600	300
300	100	100	------	100	------	------	------	100	------	------
800	100	------	------	100	100	200	------	100	100	------
100	------	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL,

CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--

CITIZENSHIP, PLACE OF SECONDARY EDUCATIO

GENERAL CHARACTERISTICS	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			UNITED		
					FOREIGN SECONDARY EDU		
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	RE OF CO
TYPE OF EMPLOYER							
PRIV.INDUSTRY,BUSINESS - - -	15,400	1,900	800	500	2,800	2,600	
SELF-EMPLOYED - - - - - - -	900	------	------	------	200	200	
COLLEGE,UNIVERSITY - - - - -	2,800	700	100	200	500	400	
JR.COLLEGE,TECH.INST. - - -	------	------	------	------	------	------	-
SEC.,ELEM.,OTHER SCHOOL - -	------	------	------	------	------	------	-
NONPROFIT ORGANIZATION - - -	500	100	------	------	100	100	
FEDERAL GOVERNMENT - - - - -	1,100	------	------	------	200	200	
USPHS,MILITARY SERVICE - - -	100	------	------	------	------	------	-
STATE GOVERNMENT - - - - - -	400	------	------	------	100	100	-
LOCAL GOVERNMENT - - - - - -	300	------	------	------	------	------	-
OTHER - - - - - - - - - - -	400	------	------	------	100	100	-
NO REPORT - - - - - - - - -	1,200	100	100	------	100	200	
PRODUCTS OR SERVICES							
AGRICULTURE AND FOOD - - - -	200	------	------	------	------	------	-
AIRCRAFT AND SPACE - - - - -	2,700	300	100	100	500	500	
CERAMICS - - - - - - - - - -	100	------	------	------	------	------	-
CHEMICALS, ALLIED PROD. - -	1,300	200	100	100	200	200	
COMMUNICATIONS - - - - - - -	500	100	------	------	100	100	
COMPUTERS - - - - - - - - -	1,000	100	100	------	200	200	
CONSTRUCTION,CIVIL ENGR. - -	3,500	400	200	100	600	600	
EDUC., INFORMATION SERV. - -	1,700	400	100	100	300	200	
ELECTRICAL EQUIP., SERV. - -	1,200	100	------	------	300	200	
ELECTRONIC EQUIP., SERV. - -	1,900	100	------	------	300	300	
LAB-SCI-PHOTO-OPT EQUIP. - -	300	------	------	------	------	100	-
MACHINERY, MECH. EQUIP. - -	2,200	300	200	100	400	400	-
MARINE TRANSPORTATION - - -	400	------	------	------	100	------	-
MEDICAL, HEALTH SERVICES - -	100	------	------	------	------	------	-
METALS, BASIC - - - - - - -	1,100	200	100	100	200	100	
METAL FABRICATED PROD. - - -	400	------	------	------	100	100	
MINING - - - - - - - - - - -	400	100	------	------	100	100	-
MOTOR VEHICLE TRANS. - - - -	200	------	------	------	------	------	-
ORDNANCE - - - - - - - - - -	200	------	------	------	------	------	-
PETROLEUM - - - - - - - - -	600	100	100	------	100	100	-
RAILWAY, RAPID TRANSIT - - -	100	------	------	------	------	------	-
UTILITIES - - - - - - - - -	700	100	------	------	100	100	
OTHER PRODUCTS, SERVICES - -	800	100	------	------	100	100	
NO REPORT - - - - - - - - -	1,400	200	100	100	200	200	

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CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--CONTINUED

CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND PLACE OF BACHELOR'S DEGREE

	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			UNITED STATES CITIZENSHIP						NO REPORT OF CITIZEN-SHIP
					FOREIGN SECONDARY EDUCATION			SECONDARY EDUCATION FROM U.S. OR NOT REPORTED			
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	
- -	15,400	1,900	800	500	2,800	2,600	1,800	200	4,200	500	200
- -	900	------	------	------	200	200	200	------	200	100	------
- -	2,800	700	100	200	500	400	400	------	400	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	500	100	------	------	100	100	100	------	100	------	------
- -	1,100	------	------	------	200	200	100	------	500	100	------
- -	100	------	------	------	------	------	------	------	100	------	------
- -	400	------	------	------	100	100	------	------	100	------	------
- -	300	------	------	------	------	------	------	------	100	------	------
- -	400	------	------	------	100	100	------	------	100	------	------
- -	1,200	100	100	------	100	200	300	------	200	100	------
- -	200	------	------	------	------	------	------	------	100	------	------
- -	2,700	300	100	100	500	500	300	------	800	100	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	1,300	200	100	100	200	200	100	------	400	------	------
- -	500	100	------	------	100	100	100	------	100	------	------
- -	1,000	100	100	------	200	200	100	------	300	------	------
- -	3,500	400	200	100	600	600	500	100	900	100	------
- -	1,700	400	100	100	300	200	300	------	300	------	------
- -	1,200	100	------	------	300	200	200	------	300	------	------
- -	1,900	100	------	------	300	300	200	------	700	100	------
- -	300	------	------	------	------	100	------	------	100	------	------
- -	2,200	300	200	100	400	400	300	------	500	100	------
- -	400	------	------	------	100	------	------	------	100	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	1,100	200	100	100	200	100	100	------	200	------	------
- -	400	------	------	------	100	100	100	------	100	------	------
- -	400	100	------	------	100	100	------	------	------	------	------
- -	200	------	------	------	------	------	------	------	------	------	------
- -	200	------	------	------	------	------	------	------	100	------	------
- -	600	100	100	------	100	100	------	------	200	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	700	100	------	------	100	100	100	------	300	------	------
- -	800	100	------	------	100	100	100	------	200	------	------
- -	1,400	200	100	100	200	200	300	------	200	100	------

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CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETIN

CITIZENSHIP, PLACE OF SECOND

GENERAL CHARACTERISTICS	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			FOREIGN S
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE
AREAS OF TECHNOLOGY					
BIOMEDICAL	100	------	------	------	------
BEHAVIORAL AND SOCIAL	300	------	------	------	------
CHEMICAL AND MATERIALS	800	200	------	------	200
METALLURGICAL	1,100	300	100	100	200
EARTH,ATMOSPHERE,MARINE	700	100	100	100	200
ENVIRONMENTAL,STRUCTURAL	2,900	400	200	100	500
ELECTROMAGNETIC	2,900	200	------	100	500
DYNAMICS AND MECHANICS	3,800	600	200	100	700
HEAT,LIGHT,APPL. PHYSICS	1,100	200	------	------	200
NUCLEAR	200	------	------	------	------
ENGR.PROCESS-APPLICATION	1,800	200	100	100	300
AUTOMATION AND CONTROL	900	100	------	------	200
WORK MGMT,EVALUATION	3,100	300	200	------	500
INFORMATION,MATHEMATICS	1,100	200	100	100	200
OTHER	500	------	------	------	100
NO REPORT	1,800	200	100	------	200
FUNCTIONS					
DESIGN	4,500	600	200	100	800
DEVELOPMENT	2,500	300	100	100	500
RESEARCH	3,100	700	100	200	600
PRODUCTION	2,500	300	200	100	400
CONTROL	6,700	500	300	100	1,200
TEACHING	1,700	400	100	100	300
OTHER	400	------	------	------	100
NO REPORT	1,700	200	100	100	200
SUPERVISORY LEVEL					
NO REG. SUPV. GIVEN	5,000	1,000	300	300	800
INDIRECT OR STAFF	3,200	400	200	100	600
TEAM OR UNIT	2,300	300	100	100	400
PROJECT OR SECTION	5,000	600	300	200	1,000
MAJOR DEPT.,DIV.,PROGRAM	3,400	300	100	100	600
GEN.MGMT OF ORGANIZATION	1,900	100	------	------	300
NO REPORT	2,200	300	100	100	300

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CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--CONTINUED

CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND PLACE OF BACHELOR'S DEGREE

STICS	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			UNITED STATES CITIZENSHIP						NO REPORT OF CITIZEN-SHIP
					FOREIGN SECONDARY EDUCATION			SECONDARY EDUCATION FROM U.S. OR NOT REPORTED			
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	
- - - - - -	100	------	------	------	------	------	------	------	------	------	------
IAL - - -	300	------	------	------	------	------	------	------	100	------	------
RIALS - - -	800	200	------	------	200	100	100	------	200	------	------
- - - - - -	1,100	300	100	100	200	100	200	------	200	------	------
MARINE - -	700	100	100	100	200	100	100	------	100	------	------
UCTURAL - -	2,900	400	200	100	500	500	400	------	700	100	------
- - - - - -	2,900	200	------	100	500	400	400	------	1,100	100	------
ANICS - - -	3,800	600	200	100	700	700	400	------	800	100	100
PHYSICS - -	1,100	200	------	------	200	200	100	------	300	------	------
- - - - - -	200	------	------	------	------	------	------	------	------	------	------
ICATION - -	1,800	200	100	100	300	300	300	------	600	100	------
NTROL - - -	900	100	------	------	200	200	100	------	200	------	------
ION - - - -	3,100	300	200	------	500	600	300	------	1,000	200	------
MATICS - -	1,100	200	100	100	200	200	100	------	200	------	------
- - - - - -	500	------	------	------	100	100	100	------	200	------	------
- - - - - -	1,800	200	100	------	200	300	400	------	300	100	100
- - - - - -	4,500	600	200	100	800	900	600	100	1,000	200	100
- - - - - -	2,500	300	100	100	500	400	200	------	800	100	------
- - - - - -	3,100	700	100	200	600	400	400	------	600	------	------
- - - - - -	2,500	300	200	100	400	400	200	------	900	100	------
- - - - - -	6,700	500	300	100	1,200	1,200	1,000	100	2,100	300	100
- - - - - -	1,700	400	100	100	300	300	300	------	300	------	------
- - - - - -	400	------	------	------	100	100	------	------	100	------	------
- - - - - -	1,700	200	100	100	200	200	400	------	300	100	------
EN - - - -	5,000	1,000	300	300	800	800	500	------	1,100	100	100
- - - - -	3,200	400	200	100	600	500	300	------	1,000	100	------
- - - - - -	2,300	300	100	100	400	400	300	------	500	100	100
N - - - - -	5,000	600	300	200	1,000	800	600	100	1,200	100	------
PROGRAM - -	3,400	300	100	100	600	500	500	------	1,200	100	------
IZATION - -	1,900	100	------	------	300	400	300	------	700	100	------
- - - - - -	2,200	300	100	100	300	300	500	------	300	100	100

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL,

CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--

CITIZENSHIP, PLACE OF SECONDARY EDUCATIO

GENERAL CHARACTERISTICS	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			UNITED	
					FOREIGN SECONDARY EDU	
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE
ALL GEOGRAPHIC LOCATIONS	23,100	3,000	1,100	800	4,100	3,800
NEW ENGLAND	1,700	300	------	100	300	300
CONNECTICUT	600	100	------	------	100	100
MAINE	------	------	------	------	------	------
MASSACHUSETTS	1,000	100	------	100	200	200
NEW HAMPSHIRE	------	------	------	------	------	------
RHODE ISLAND	100	------	------	------	------	------
VERMONT	------	------	------	------	------	------
MIDDLE ATLANTIC	6,700	800	200	300	1,000	1,100
NEW JERSEY	1,600	200	------	100	300	300
NEW YORK	3,500	400	100	100	600	600
PENNSYLVANIA	1,500	200	100	100	200	200
EAST NORTH CENTRAL	3,700	600	300	100	700	600
ILLINOIS	1,300	200	100	------	200	200
INDIANA	400	100	------	------	100	100
MICHIGAN	700	100	100	------	100	100
OHIO	1,000	100	------	------	200	100
WISCONSIN	300	100	------	------	------	------
WEST NORTH CENTRAL	900	200	------	------	100	100
IOWA	100	------	------	------	------	------
KANSAS	100	------	------	------	------	------
MINNESOTA	200	------	------	------	------	------
MISSOURI	400	100	------	------	100	------
NEBRASKA	------	------	------	------	------	------
NORTH DAKOTA	------	------	------	------	------	------
SOUTH DAKOTA	------	------	------	------	------	------
SOUTH ATLANTIC	2,500	300	200	100	400	300
DELAWARE	100	------	------	------	------	------
DISTRICT OF COLUMBIA	400	------	------	------	100	------
FLORIDA	500	------	100	------	------	100
GEORGIA	200	100	------	------	100	------
MARYLAND	600	100	------	------	100	100
NORTH CAROLINA	200	------	------	------	------	------
SOUTH CAROLINA	100	------	------	------	------	------
VIRGINIA	400	------	------	------	------	100
WEST VIRGINIA	100	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--CONTINUED

CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND PLACE OF BACHELOR'S DEGREE

	TOTAL FOREIGN BORN	FOREIGN CITIZENSHIP			UNITED STATES CITIZENSHIP						NO REPORT OF CITIZENSHIP
					FOREIGN SECONDARY EDUCATION			SECONDARY EDUCATION FROM U.S. OR NOT REPORTED			
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	
- -	23,100	3,000	1,100	800	4,100	3,800	3,000	200	6,000	800	300
- -	1,700	300	------	100	300	300	200	------	300	100	------
- -	600	100	------	------	100	100	100	------	200	100	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	1,000	100	------	100	200	200	100	------	200	100	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	6,700	800	200	300	1,000	1,100	1,000	------	1,800	200	100
- -	1,600	200	------	100	300	300	300	------	400	------	------
- -	3,500	400	100	100	600	600	600	------	1,000	200	100
- -	1,500	200	100	100	200	200	200	------	400	------	------
- -	3,700	600	300	100	700	600	400	------	1,000	100	------
- -	1,300	200	100	------	200	200	200	------	300	------	------
- -	400	100	------	------	100	100	------	------	100	------	------
- -	700	100	100	------	100	100	100	------	200	------	------
- -	1,000	100	------	------	200	100	100	------	300	------	------
- -	300	100	------	------	------	------	------	------	100	------	------
- -	900	200	------	------	100	100	100	------	200	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	200	------	------	------	------	------	------	------	100	------	------
- -	400	100	------	------	100	------	------	------	100	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	------	------	------	------	------	------	------	------	------	------	------
- -	2,500	300	200	100	400	300	300	------	700	100	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	400	------	------	------	100	------	100	------	100	------	------
- -	500	------	100	------	------	100	100	------	100	------	------
- -	200	100	------	------	100	------	------	------	100	------	------
- -	600	100	------	------	100	100	100	------	200	------	------
- -	200	------	------	------	------	------	------	------	------	------	------
- -	100	------	------	------	------	------	------	------	------	------	------
- -	400	------	------	------	------	100	100	------	100	------	------
- -	100	------	------	------	------	------	------	------	------	------	------

NATIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSON

CHARACTERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITER

CITIZENSHIP, PLACE OF SECONDARY EDUC

GENERAL CHARACTERISTICS	TOTAL FOREIGN BCRN	FOREIGN CITIZENSHIP			UN	
					FOREIGN SECONDARY	
		BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE
GEOGRAPHIC LOCATION, CONTINUED						
EAST SOUTH CENTRAL - - - - -	400	100	------	------	100	100
ALABAMA - - - - - - - - -	100	------	------	------	------	------
KENTUCKY - - - - - - - - -	100	------	------	------	------	------
MISSISSIPPI - - - - - - - -	------	------	------	------	------	------
TENNESSEE - - - - - - - - -	200	------	------	------	------	------
WEST SOUTH CENTRAL - - - - -	1,100	100	100	100	200	200
ARKANSAS - - - - - - - - -	------	------	------	------	------	------
LOUISIANA - - - - - - - - -	200	------	------	------	------	100
OKLAHOMA - - - - - - - - -	100	------	------	------	------	------
TEXAS - - - - - - - - - - -	700	100	------	------	100	100
MOUNTAIN - - - - - - - - - -	700	100	100	------	100	200
ARIZONA - - - - - - - - - -	100	------	------	------	------	------
COLORADO - - - - - - - - -	200	------	------	------	------	100
IDAHO - - - - - - - - - - -	------	------	------	------	------	------
MONTANA - - - - - - - - - -	------	------	------	------	------	------
NEVADA - - - - - - - - - -	------	------	------	------	------	------
NEW MEXICO - - - - - - - -	100	------	------	------	------	------
UTAH - - - - - - - - - - -	100	------	------	------	------	------
WYOMING - - - - - - - - - -	------	------	------	------	------	------
PACIFIC - - - - - - - - - -	5,000	500	300	100	1,000	900
ALASKA - - - - - - - - - -	------	------	------	------	------	------
CALIFORNIA - - - - - - - -	4,200	400	200	100	800	700
HAWAII - - - - - - - - - -	100	------	------	------	------	------
OREGON - - - - - - - - - -	100	------	------	------	------	------
WASHINGTON - - - - - - - -	600	100	------	------	100	100
OUTLYING AREAS - - - - - - -	100	------	------	------	------	------
CANAL ZONE - - - - - - - -	------	------	------	------	------	------
GUAM - - - - - - - - - - -	------	------	------	------	------	------
PUERTO RICO - - - - - - - -	100	------	------	------	------	------
VIRGIN ISLANDS - - - - - -	------	------	------	------	------	------
FOREIGN - - - - - - - - - -	300	------	------	------	100	100

NOTE - GROUPS MAY NOT ADD TO TOTAL BECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINE ASTRONAUTICAL), CIVIL (ARCHITECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANIT (COMMUNICATIONS, ELECTRICAL, ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGIN ENGINEERING SCIENCE, ENGINEERING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (METALLURGICAL, WELDING), MINERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PE BIOENGINEERING, CERAMIC, NAVAL ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERIN PHYSICS, OTHER NONENGINEERING).

TIONAL REGISTER OF SCIENTIFIC AND TECHNICAL PERSONNEL, 1969

TERISTICS OF FOREIGN BORN ENGINEERS MEETING CRITERIA--CONTINUED

CITIZENSHIP, PLACE OF SECONDARY EDUCATION, AND PLACE OF BACHELOR'S DEGREE

OTAL OREIGN BORN	FOREIGN CITIZENSHIP			UNITED STATES CITIZENSHIP						NO REPORT OF CITIZENSHIP
				FOREIGN SECONDARY EDUCATION			SECONDARY EDUCATION FROM U.S. OR NOT REPORTED			
	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	BS FROM FOREIGN COLLEGE	BS FROM U.S. COLLEGE	NO REPORT OF BS OR COLLEGE	
400	100	------	------	100	100	100	------	100	------	------
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
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200	------	------	------	------	------	------	------	------	------	------
1,100	100	100	100	200	200	100	------	200	------	------
------	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	100	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
700	100	------	------	100	100	100	------	100	------	------
700	100	100	------	100	200	------	------	200	------	------
100	------	------	------	------	------	------	------	------	------	------
200	------	------	------	------	100	------	------	------	------	------
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100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
------	------	------	------	------	------	------	------	------	------	------
5,000	500	300	100	1,000	900	700	------	1,400	100	100
------	------	------	------	------	------	------	------	------	------	------
4,200	400	200	100	800	700	600	------	1,200	100	100
100	------	------	------	------	------	------	------	------	------	------
100	------	------	------	------	------	------	------	------	------	------
600	100	------	------	100	100	------	------	200	------	------
100	------	------	------	------	------	------	------	------	------	------
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100	------	------	------	------	------	------	------	------	------	------
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300	------	------	------	100	100	------	------	100	------	------

ECAUSE OF ROUNDING. GROUPS OF CURRICULA ARE DEFINED AS AEROSPACE (AERONAUTICAL AND
ECTURAL, CIVIL, CONSTRUCTION, ENVIRONMENTAL, SANITARY, TRANSPORTATION), ELECTRICAL
ELECTRONIC), GENERAL (ENGINEERING MECHANICS, ENGINEERING GENERAL, ENGINEERING PHYSICS,
ING TECHNOLOGY, INDUSTRIAL, MATERIALS), MECHANICAL (MARINE, MECHANICAL), METALLURGICAL
ERAL (GEOLOGICAL, GEOPHYSICAL, MINERAL, MINING, PETROLEUM), OTHER (AGRICULTURAL,
L ARCHITECTURE, NUCLEAR, TEXTILE, OTHER ENGINEERING, BUSINESS ADMINISTRATION, CHEMISTRY,
).

BUDGET BUREAU NO. 99-S69002
APPROVAL EXPIRES FEBRUARY 1971

NATIONAL ENGINEERS REGISTER

CONDUCTED BY THE

ENGINEERS JOINT COUNCIL

345 EAST 47TH STREET, NEW YORK, N. Y., 10017

AND THE NATIONAL SCIENCE FOUNDATION

PLEASE PRINT ANSWERS IN DARK INK OR TYPE

IF YOUR NAME OR ADDRESS IS INCORRECT, PLEASE ENTER CORRECT INFORMATION BELOW:
PLEASE GIVE FULL NAME

THE PERSONAL INFORMATION YOU PROVIDE IS CONSIDERED PRIVILEGED AND IS NOT AVAILABLE FOR PRIVATE OR COMMERCIAL PURPOSES.

PLEASE DO NOT WRITE IN THIS COLUMN

VITA:

1. DATE OF BIRTH (Month / Day / Year)	2. STATE OR FOREIGN COUNTRY OF BIRTH	3. STATE OR FOREIGN COUNTRY OF SECONDARY SCHOOL GRADUATION	4. SEX ☐ 1 - MALE ☐ 2 - FEMALE

5. CITIZENSHIP (check one)
☐ 1 - USA
☐ 2 - NON-USA (specify country) ....

6. How many years of professional work experience requiring a bachelor's degree or its equivalent, including teaching, have you had? ☐

EDUCATION:

7. COLLEGE, UNIVERSITY, OR OTHER INSTITUTION (Include city and state)	DEGREE, IF ANY	YEAR OF DEGREE	CURRICULUM (Select Name and Number from List A) NUMBER	NAME

8. If you are a student, check your status.
☐ 1 - STUDENT, FULL-TIME ☐ 2 - STUDENT, PART-TIME

PROFESSIONAL IDENTIFICATION:

9. If you regard yourself primarily as an engineer check here: ☐ If you regard yourself as other than an engineer, please identify yourself as:
☐ 1 - ARCHITECT ☐ 3 - CHEMIST ☐ 5 - MATHEMATICIAN ☐ 7 - TECHNICIAN
☐ 2 - PHYSICIST ☐ 4 - GEOLOGIST ☐ 6 - METALLURGIST ☐ 8 - OTHER (SPECIFY) ....

10. PROFESSIONAL SOCIETY MEMBERSHIP: Circle the number in front of all professional societies of which you are a member. For write-ins include only NATIONAL societies and use identifying words in full.

1A - AERONAUTICS AND ASTRONAUTICS (AIAA)
1B - AGRICULTURAL (ASAE)
1C - AIR POLLUTION CONTROL (APCA)
1D - AUDIO (AES)
1E - AUTOMOTIVE (SAE)
1F - CERAMIC (NICE)
1G - CHEMICAL (AIChE)
1H - CIVIL (ASCE)
1I - CONCRETE (ACI)
1J - CONSULTING (AICE)
1K - CORROSION (NACE)
1L - COST (AACE)
1M - COUNTY (NACE)
1N - EDUCATION (ASEE)
1O - ELECTRICAL AND ELECTRONICS (IEEE)
1P - FIRE PROTECTION (SFPE)
1Q - FLUID POWER (FPS)
1R - HEATING, REFRIGERATING, AND AIR-CONDITIONING (ASHRAE)
1S - HISTORY (SHOT)
1T - INDUSTRIAL (AIIE)
1U - INSTRUMENT (ISA)
1V - ILLUMINATING (IES)
1W - IRON AND STEEL (AISE)
1X - LUBRICATION (ASLE)
1Y - MARINE TECHNOLOGY (MTS)
1Z - MATERIAL MANAGEMENT (IMMS)
2A - MECHANICAL (ASME)
2B - METALS (ASM)
2C - MILITARY (SAME)
2D - MINING, METALLURGICAL, PETROLEUM (AIME)
2E - MOTION PICTURE (SMPTE)
2F - NAVAL ARCHITECTS AND MARINE (SNAME)
2G - NAVAL ENGINEERS (ASNE)
2H - NAVAL SHIP SYSTEMS COMMAND (ASE)
2I - NONDESTRUCTIVE TESTING (ASNT)
2J - NUCLEAR (ANS)
2K - PACKAGING & HANDLING (SPHE)
2L - PACKAGING, HANDLING AND LOGISTICS (NIPHLE)
2M - PHOTOGRAMMETRY (ASP)
2N - PHOTOGRAPHIC (SPSE)
2O - PHOTO-OPTICAL INSTRUMENTATION (SPIE)
2P - PLANT (AIPE)
2Q - PLASTICS (SPE)
2R - POWER (NAPE)
2S - PROFESSIONAL (NSPE)
2T - PULP AND PAPER (TAPPI)
2U - QUALITY CONTROL (ASQC)
2V - RAILWAY (AREA)
2W - REPRODUCTION (SRE)
2X - SAFETY (ASSE)
2Y - SANITARY (ASSE)
2Z - STANDARDS (SES)
3A - STRESS ANALYSIS (SESA)
3B - TRAFFIC (ITE)
3C - TESTING AND MATERIALS (ASTM)
3D - TOOL AND MANUFACTURING (ASTME)
3E - VALUE (SAVE)
3F - WATER POLLUTION CONTROL (WPCF)
3G - WATER WORKS (AWWA)
3H - WELDING (AWS)
3I - WELL LOG ANALYSTS (SPWLA)
3J - WOMEN (SWE)
9A - OTHER (SPECIFY) ....
9X - NONE

11. Are you registered by a state board of engineering examiners? ☐ Yes ☐ No

If so: In which state(s) are you registered?

Month	Day	Year	COUNTRY OF BIRTH	SECONDARY SCHOOL GRADUATION	☐ 1 - MALE ☐ 2 - FEMALE

5. CITIZENSHIP (check one)
☐ 1 - USA
☐ 2 - NON-USA (specify country) ....

6. How many years of professional work experience requiring a bachelor's degree or its equivalent, including teaching, have you had? ☐

EDUCATION:

7. COLLEGE, UNIVERSITY, OR OTHER INSTITUTION (Include city and state)	DEGREE, IF ANY	YEAR OF DEGREE	CURRICULUM (Select Name and Number from List A) NUMBER	NAME

8. If you are a student, check your status.
☐ 1 - STUDENT, FULL-TIME ☐ 2 - STUDENT, PART-TIME

PROFESSIONAL IDENTIFICATION:

9. If you regard yourself primarily as an engineer check here: ☐ If you regard yourself as other than an engineer, please identify yourself as:
☐ 1 - ARCHITECT ☐ 3 - CHEMIST ☐ 5 - MATHEMATICIAN ☐ 7 - TECHNICIAN
☐ 2 - PHYSICIST ☐ 4 - GEOLOGIST ☐ 6 - METALLURGIST ☐ 8 - OTHER (SPECIFY) ....

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1T - INDUSTRIAL (AIIE)
1U - INSTRUMENT (ISA)
1V - ILLUMINATING (IES)
1W - IRON AND STEEL (AISE)
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1Y - MARINE TECHNOLOGY (MTS)
1Z - MATERIAL MANAGEMENT (IMMS)
2A - MECHANICAL (ASME)
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2X - SAFETY (ASSE)
2Y - SANITARY (ASSE)
2Z - STANDARDS (SES)
3A - STRESS ANALYSIS (SESA)
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3G - WATER WORKS (AWWA)
3H - WELDING (AWS)
3I - WELL LOG ANALYSTS (SPWLA)
3J - WOMEN (SWE)
9A - OTHER (SPECIFY) ....
9X - NONE

11. Are you registered by a state board of engineering examiners? ☐ Yes ☐ No
If so: In which state(s) are you registered? ....

PROFESSIONAL EMPLOYMENT:

12. Check your employment status.
☐ 1 - EMPLOYED FULL-TIME ☐ 3 - UNEMPLOYED AND SEEKING EMPLOYMENT ☐ 4 - NOT EMPLOYED AND NOT SEEKING EMPLOYMENT ☐ 5 - RETIRED
☐ 2 - EMPLOYED PART-TIME

13. Please give name of present principal employer (if self-employed write in "self"), actual place of employment, and title of present position.

.... Name of present principal employer .... Title of present position

.... Actual place of employment (city and state)

14. Check the box of the category which is most appropriate for your present principal employer (check only one).
☐ 0 - PRIVATE INDUSTRY OR BUSINESS
☐ 1 - SELF-EMPLOYED
☐ 2 - COLLEGE OR UNIVERSITY
☐ 3 - JUNIOR COLLEGE OR TECHNICAL INSTITUTE
☐ 4 - SECONDARY, ELEMENTARY OR OTHER SCHOOL
☐ 5 - NONPROFIT ORGANIZATION, OTHER THAN A SCHOOL
☐ 6 - FEDERAL GOVERNMENT—CIVILIAN EMPLOYEE
☐ 7 - USPHS, MILITARY SERVICE—ACTIVE DUTY
☐ 8 - STATE GOVERNMENT
☐ 9 - LOCAL GOVERNMENT
☐ OTHER (specify) ....

NSF FORM 70 JUNE 1969

—PLEASE COMPLETE OTHER SIDE—

PROFESSIONAL EMPLOYMENT CONTINUED

PLEASE DO NOT WRITE IN THIS COLUMN

15. Is ANY of your work being supported or sponsored by U. S. Government funds? ☐ Yes ☐ No ☐ Don't know
If yes, is your work related to any of the following programs:

☐ A - AGRICULTURE	☐ E - HEALTH	☐ J - PUBLIC WORKS	☐ N - URBAN DEVELOPMENT
☐ B - ATOMIC ENERGY	☐ F - HOUSING	☐ K - RURAL DEVELOPMENT	☐ OTHER PROGRAM (Specify)
☐ C - DEFENSE	☐ G - INTERNATIONAL	☐ L - SPACE	
☐ D - EDUCATION	☐ H - NATURAL RESOURCES	☐ M - TRANSPORTATION	________

Approximate the total percent of your time devoted to these Federally supported activities. ....%.

11 12 13

16. Based upon your PRESENT employment, describe your *Employment Profile:*

PRESENT EMPLOYMENT PROFILE				
PRIMARY DESCRIPTION		SIGNIFICANT ADDITIONAL DESCRIPTIONS		
Number	Product or Service from List B	Number List B	Number List B	Number List B
Number	Technology/Science from List C	Number List C	Number List C	Number List C
Number	Function from List D	Number List D	Number List D	Number List D
Number	Supervisory Responsibility from List E	List "Additional Descriptions" for significant qualifications only; otherwise leave blank.		

See enclosed lists for individual entries and example.

17. Based on your academic training and total work experience, describe your greatest competence profile showing the interdependence of area of technology or science, product or service, and function. If your greatest competence is the same as your PRESENT EMPLOYMENT PROFILE, check here ☐, if not, complete this profile.

GREATEST COMPETENCE PROFILE				
PRIMARY DESCRIPTION		SIGNIFICANT ADDITIONAL DESCRIPTIONS		
Number	Product or Service from List B	Number List B	Number List B	Number List B
Number	Technology/Science from List C	Number List C	Number List C	Number List C
Number	Function from List D	Number List D	Number List D	Number List D

LANGUAGE AND AREA KNOWLEDGES:

18. FOREIGN LANGUAGE: List the languages (other than English) in which you have competence and indicate with a check mark (v) your proficiencies. If you have no foreign language competence, check here. ☐

14

	PROFICIENCY				
	CAN PREPARE AND DELIVER LECTURES	CAN CONVERSE	HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS	CAN READ TECHNICAL ARTICLES FOR OWN USE	SOME KNOWLEDGE BUT CAN'T USE AS A

Approximate the total percent of your time devoted to these Federally supported activities. .... %.

11 12 13

16. Based upon your PRESENT employment, describe your *Employment Profile:*

PRESENT EMPLOYMENT PROFILE				
PRIMARY DESCRIPTION		SIGNIFICANT ADDITIONAL DESCRIPTIONS		
Number	Product or Service from List B	Number List B	Number List B	Number List B
Number	Technology/Science from List C	Number List C	Number List C	Number List C
Number	Function from List D	Number List D	Number List D	Number List D
Number	Supervisory Responsibility from List E	List "Additional Descriptions" for significant qualifications only; otherwise leave blank.		

See enclosed lists for individual entries and example.

17. Based on your academic training and total work experience, describe your greatest competence profile showing the interdependence of area of technology or science, product or service, and function. If your greatest competence is the same as your PRESENT EMPLOYMENT PROFILE, check here [ ], if not, complete this profile.

GREATEST COMPETENCE PROFILE				
	PRIMARY DESCRIPTION	SIGNIFICANT ADDITIONAL DESCRIPTIONS		
Number	Product or Service from List B	Number List B	Number List B	Number List B
Number	Technology/Science from List C	Number List C	Number List C	Number List C
Number	Function from List D	Number List D	Number List D	Number List D

LANGUAGE AND AREA KNOWLEDGES:

18. FOREIGN LANGUAGE: List the languages (other than English) in which you have competence and indicate with a check mark (√) your proficiencies. If you have no foreign language competence, check here. ☐

14

NAME OF LANGUAGE(S)	PROFICIENCY								
	CAN PREPARE AND DELIVER LECTURES		CAN CONVERSE		HAVE FACILITY TO TRANSLATE TECHNICAL JOURNALS		CAN READ TECHNICAL ARTICLES FOR OWN USE		SOME KNOWLEDGE BUT CAN'T USE AS A MEDIUM OF COMMUNICATION 9
	EASILY 1	WITH DIFFICULTY 2	FLUENTLY 3	PASSABLY 4	INTO ENGLISH 5	FROM ENGLISH 6	EASILY 7	WITH DIFFICULTY 8	

15 16 17 18

19 20 21 22

19. AREA KNOWLEDGE: List the foreign countries or areas with which you are familiar by residence or professional specialization.

COUNTRY OR AREA	TOTAL YEARS RESIDENCE OR SPECIALIZATION	YEAR LAST VISITED OR SPECIALIZED	NATURE OF YOUR KNOWLEDGE OR SPECIALIZATION

DATE PREPARED:	SIGNATURE: (Please Sign Full Name)

EJC

ENGINEERS JOINT COUNCIL

345 EAST 47TH STREET, NEW YORK, N. Y. 10017
(212) 752-6800

NATIONAL ENGINEERS REGISTER

June, 1969

Dear Engineering Society Member:

Your name was picked at random from your engineering society's membership list as part of a sample of 100,000 engineers to be surveyed by Engineers Joint Council. The purpose of this survey, the third since 1964, is to provide current information on the nation's vital supply of engineering talent for the National Register of Scientific and Technical Personnel. EJC operates the National Engineers Register under contract with the National Science Foundation as one of its activities on behalf of the engineering profession.

In order to insure individual privacy, information you provide is considered privileged and is never released for commercial purposes. Only summary statistics are published. The Register also provides a means for locating qualified persons in event of urgent national needs. Engineers Joint Council's operation of this project assures that both national and professional interests are served in all uses of National Engineers Register data.

You may have participated in previous NER surveys. If so, you will note that this year's form has been improved and simplified. However, the changes have made it necessary that we ask you to fill out the entire form anew, even though some information may not have changed since the last survey. In any event, you will find that the form can be completed in about 15 minutes. Please answer the questions fully and accurately. Even if you do not consider yourself an engineer, or are no longer active, it is important that you return the form with all appropriate information filled in. This will also save us from mailing you follow-up questionnaires.

In the unlikely case that you receive duplicate forms, this is probably due to variations in your name or address in the records of the different societies to which you belong. We hope you will excuse any such duplication. Please complete one form, but return both to us so we can clear our records.

A postpaid envelope is enclosed for your convenience in replying. Engineers Joint Council and the societies cooperating in this project appreciate your assistance

contract with the National Science Foundation as one of its activities on behalf of the engineering profession.

In order to insure individual privacy, information you provide is considered privileged and is never released for commercial purposes. Only summary statistics are published. The Register also provides a means for locating qualified persons in event of urgent national needs. Engineers Joint Council's operation of this project assures that both national and professional interests are served in all uses of National Engineers Register data.

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A postpaid envelope is enclosed for your convenience in replying. Engineers Joint Council and the societies cooperating in this project appreciate your assistance in providing information of importance to the engineering profession.

Sincerely,

John D. Alden

John D. Alden
Director
National Engineers Register

Enclosures

...TO ADVANCE THE ART AND SCIENCE OF ENGINEERING IN THE PUBLIC INTEREST

BUDGET BUREAU NO. 99-069002
APPROVAL EXPIRES FEBRUARY 1971

LISTS OF ENGINEERING CURRICULA, PRODUCTS OR SERVICES, AREAS OF TECHNOLOGY AND SCIENCE, FUNCTIONS AND SUPERVISORY RESPONSIBILITIES

FOR USE WITH
NATIONAL ENGINEERS REGISTER
CONDUCTED BY THE
ENGINEERS JOINT COUNCIL
345 EAST 47TH STREET, NEW YORK, N. Y., 10017
AND THE NATIONAL SCIENCE FOUNDATION

List A. Curricula to Be Used with Question 7.

Select from this list the appropriate number and curriculum title to describe your educational background for reporting in question 7.

1. Aeronautical and Astronautical
2. Agricultural
3. Architectural
4. Bioengineering
5. Ceramic
6. Chemical
7. Civil
8. Communications
9. Construction
10. Electrical
11. Electronic
12. Engineering Mechanics
13. Engineering General
14. Engineering Physics
15. Engineering Science
16. Engineering Technology
17. Environmental
18. Geological
19. Geophysical
20. Industrial
21. Marine
22. Materials
23. Mechanical
24. Metallurgical
25. Mineral
26. Mining
27. Naval Architecture
28. Nuclear
29. Petroleum
30. Sanitary
31. Textile
32. Transportation
33. Welding
90. Other Engineering (specify)
34. Business Administration
35. Chemistry
36. Physics
99. Other Nonengineering (specify)

EXAMPLE FOR COMPLETING QUESTION 16.

The work of most engineers is related, directly or indirectly, to the combination of some Product or Service, Area of Technology and Science, Function, and Supervisory Responsibility.

We have grouped Products and Services in List B, using both general and specific terms within related fields. Look over the major headings and find the field that most specifically fits your situation. If your field cuts across several Products or Services look for the most appropriate single general term, or specify one. List C, Areas of Technology and Science, is made up of terms that can apply to numerous Products or Services. Again, both general and specific terms are listed. List D, Functions, consists of terms describing work activities in which engineers engage. List E, Supervisory Responsibility provides a means by which you can indicate the level of your Supervisory Responsibility.

When you have looked over the Lists, choose one term from each List so that the combination best provides a description of your employment profile. If the listed terms are inadequate in your particular situation, you may write in your own words in the space provided. The following is an example of an employment profile showing the relationship among Product or Service, Areas of Technology and Science, Function, and Supervisory Responsibility.

EXAMPLE: An engineer is designing pumps, with particular attention to the selection of materials for specialized applications. He would therefore report his employment profile as consisting of 1123 "Pumps and Liquid Handling Equipment" as his Product or Service from List B, and no other Product or Service would be needed in the significant additional description column; 102 "Material Applications" would be the primary description of Areas of Technology and Science from List C with additional des-

6. Chemical
7. Civil
8. Communications
9. Construction
10. Electrical
11. Electronic
12. Engineering Mechanics
13. Engineering General
19. Geophysical
20. Industrial
21. Marine
22. Materials
23. Mechanical
24. Metallurgical
25. Mineral
26. Mining
32. Transportation
33. Welding
90. Other Engineering (specify)
34. Business Administration
35. Chemistry
36. Physics
99. Other Nonengineering (specify)

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We have grouped Products and Services in List B, using both general and specific terms within related fields. Look over the major headings and find the field that most specifically fits your situation. If your field cuts across several Products or Services look for the most appropriate single general term, or specify one. List C, Areas of Technology and Science, is made up of terms that can apply to numerous Products or Services. Again, both general and specific terms are listed. List D, Functions, consists of terms describing work activities in which engineers engage. List E, Supervisory Responsibility provides a means by which you can indicate the level of your Supervisory Responsibility.

When you have looked over the Lists, choose one term from each List so that the combination best provides a description of your employment profile. If the listed terms are inadequate in your particular situation, you may write in your own words in the space provided. The following is an example of an employment profile showing the relationship among Product or Service, Areas of Technology and Science, Function, and Supervisory Responsibility.

EXAMPLE: An engineer is designing pumps, with particular attention to the selection of materials for specialized applications. He would therefore report his employment profile as consisting of 1123 "Pumps and Liquid Handling Equipment" as his Product or Service from List B, and no other Product or Service would be needed in the significant additional description column; 102 "Material Applications" would be the primary description of Areas of Technology and Science from List C with additional descriptions 031 "Corrosion" and 061 "Fluid Dynamics"; his selection from List D, Functions, would be 05 "Design"; and his Supervisory Responsibility would be selected from List E, 1, "No regular supervision given."

PRESENT EMPLOYMENT PROFILE				
PRIMARY DESCRIPTION		SIGNIFICANT ADDITIONAL DESCRIPTIONS		
1123	Pumps and liquid handling equipment	Number List B	Number List B	Number List B
102	Material applications	031	061	Number List C
05	Design	Number List D	Number List D	Number List D
1	No regular supervision given			

Complete in a similar manner question 17, Profile of Greatest Competence, using Lists B, C, and D to provide the required description.

List B. Products or Services for Use with Questions 16 and 17.

The following is a list of products or services for use with questions 16 and 17. Select from this list the appropriate number and product or service which applies to you.

Agriculture and Food

0000 This field generally
0001 Agricultural services
0002 Animals
0003 Distilled products
0004 Fish products
0005 Forestry
0006 Food and beverage products
0007 Natural fibers
0008 Plants
0009 Tobacco
0010 Other (specify)

Aircraft and Space

0100 This field generally
0101 Aeronautics (general)
0102 Aircraft
0103 Aircraft V/STOL
0104 Aircraft engines
0105 Aircraft parts and accessories
0106 Aircraft services
0107 Airlines
0108 Astronautics (general)
0109 Launch vehicles
0110 Re-entry devices
0111 Spacecraft
0112 Spacecraft engines
0113 Spacecraft parts and accessories
0114 Spacecraft services
0115 Other (specify)

Ceramics

0200 This field generally
0201 Abrasives
0202 Cement, concrete, and gypsum products
0203 Clay products
0204 Glass products
0205 Insulation materials (thermal)
0206 Refractories
0207 Services related to ceramics
0208 Other (specify)

Chemicals and Allied Products

0300 This field generally
0301 Agricultural chemicals
0302 Carbon products
0303 Chemical services
0304 Cosmetics
0305 Drugs and pharmaceuticals
0306 Dyes and organic pigments
0307 Elastomers
0308 Explosives
0309 Fermentation products
0310 Fertilizer
0311 Gases
0312 Industrial chemicals (general)
0313 Inorganics
0314 Nuclear and radioactive materials
0315 Organics
0316 Paints and coatings
0317 Petrochemicals
0318 Photographic chemicals
0319 Plastics and synthetic polymers
0320 Propellants
0321 Soap and detergents
0322 Synthetic fibers
0323 Other (specify)

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Communications

0400 This field generally
0401 Broadcasting
0402 Cable television
0403 Communication services
0404 Motion pictures
0405 Telegraph
0406 Telephone
0407 Other (specify)

(Also see Electrical and Electronics fields)

Computers

0500 This field generally
0501 Analog equipment
0502 Components and parts
0503 Computer services
0504 Digital equipment
0505 Hybrid equipment
0506 Memory units
0507 Optical equipment
0508 Peripheral equipment
0509 Software
0510 Other (specify)

Construction and Civil Engineering

0600 This field generally
0601 Airports and facilities
0602 Architecture
0603 Bridges
0604 Buildings and structures (general)
0605 Chemical plants and facilities
0606 City, regional, and urban planning
0607 Construction services
0608 Dams and water control structures
0609 Excavation and foundation
0610 Heavy construction (general)
0611 Highways
0612 Hydro-electric facilities
0613 Industrial plants and facilities
0614 Landscaping
0615 Military construction (not elsewhere classified)
0616 Prefabricated construction
0617 Public works (general)
0618 Recreational facilities
0619 Rivers and harbors
0620 Sanitary facilities
0621 Spacecraft and missile facilities
0622 Surveying and mapping
0623 Thin-shell construction
0624 Tunneling
0625 Water supply and treatment
0626 Other (specify)

Educational and Information Services

0700 This field generally
0701 Engineering instruction
0702 Information services
0703 Libraries
0704 Technical instruction
0705 Other (specify)

Electrical Equipment and Services

0800 This field generally
0801 Business and office equipment
0802 Components and accessories
0803 Controls
0804 Electrical services
0805 Household appliances
0806 Industrial electrical equipment (general)
0807 Instruments and test equipment
0808 Insulated conductors
0809 Lighting and wiring
0810 Magnetic devices

0918 Sonar
0919 Sonic and ultrasonic devices
0920 Thermo-electric and thermionic devices
0921 X-ray
0922 Other (specify)

(Also see Communications and Computers fields)

Laboratory, Scientific, Photographic, and Optical Equipment

1000 This field generally
1001 Laboratory and scientific apparatus
1002 Measuring and control instruments (except temperature)
1003 Optical instruments and lenses
1004 Photographic equipment
1005 Temperature measurement and thermostatic instruments
1006 Timing devices, clocks and watches
1007 Other (specify)

(Also see Electrical and Electronic fields)

Machinery and Mechanical Equipment

1100 This field generally
1101 Air compressors, blowers, gas handling equipment
1102 Air conditioning, heating, and ventilating
1103 Bearings
1104 Construction equipment
1105 Dies, jigs, and patterns
1106 Distilling equipment
1107 Farm machinery
1108 Food machinery
1109 Furnaces, heating equipment, ovens
1110 Gears
1112 Hydraulic machinery
1113 Industrial machinery and equipment (general)
1114 Internal combustion engines, (general)
1115 Machine tools and accessories
1116 Materials handling machinery
1117 Mining machinery
1118 Nuclear machinery
1119 Paper machinery
1120 Pneumatic equipment
1121 Power transmission equipment (mechanical)
1122 Printing and duplicating machinery
1123 Pumps and liquid handling equipment
1124 Refrigerating equipment
1125 Specialized industrial machinery
1126 Steam engines
1127 Textile machinery
1128 Turbines
1129 Vending and service machinery
1130 Other (specify)

Marine Transportation

1200 This field generally
1201 Boats and small craft
1202 Inland waterway craft and services
1203 Marine auxiliaries
1204 Marine engines
1205 Merchant ships
1206 Naval architectural services
1207 Naval vessels
1208 Ocean transportation
1209 Port facilities and services
1210 Propellers and shafting
1211 Shipbuilding and repair services

Metal Fabricated Products

1500 This field generally
1501 Boilers
1502 Cans and containers
1503 Electroplated and coated products
1504 Hardware
1505 Machined or turned products
1506 Metal fabrication services
1507 Pipe, fittings, and valves
1508 Pressure vessels
1509 Sheet metal products
1510 Stampings
1511 Structural steel products
1512 Weldments
1513 Wire products
1514 Other (specify)

Mining

1600 This field generally
1601 Coal
1602 Iron ores
1603 Mining services
1604 Non-ferrous metal ores
1605 Non-metallic minerals
1606 Quarry products
1607 Sulfur
1608 Uranium and radioactive ores
1609 Other (specify)

Motor Vehicle Transportation

1700 This field generally
1701 Automobiles
1702 Buses, trucks, and trailers
1703 Engines
1704 Motorcycles, etc.
1705 Motor transportation services
1706 Parts and accessories
1707 Other (specify)

Ordnance

1800 This field generally
1801 Ammunition
1802 Fire control equipment
1803 Guided missiles
1804 Guns
1805 Ordnance services
1806 Small arms
1807 Tanks
1808 Other (specify)

Petroleum

1900 This field generally
1901 Asphalt materials
1902 Crude petroleum
1903 Gas pipelines
1904 Liquified gas
1905 Lubricating oil and grease
1906 Natural gas
1907 Oilfield services
1908 Oil pipelines
1909 Refinery products
1910 Reservoirs (oil and gas)
1911 Other (specify)

Railway and Rapid Transit

2000 This field generally
2001 Railroad equipment
2002 Railroad transportation
2003 Railway services
2004 Rapid transit
2005 Other (Specify)

Utilities

2100 This field generally
2101 Electric utilities
2102 Electric and gas utilities (combination)

0604 Buildings and structures (general)
0605 Chemical plants and facilities
0606 City, regional, and urban planning
0607 Construction services
0608 Dams and water control structures
0609 Excavation and foundation
0610 Heavy construction (general)
0611 Highways
0612 Hydro-electric facilities
0613 Industrial plants and facilities
0614 Landscaping
0615 Military construction (not elsewhere classified)
0616 Prefabricated construction
0617 Public works (general)
0618 Recreational facilities
0619 Rivers and harbors
0620 Sanitary facilities
0621 Spacecraft and missile facilities
0622 Surveying and mapping
0623 Thin-shell construction
0624 Tunneling
0625 Water supply and treatment
0626 Other (specify)

Educational and Information Services

0700 This field generally
0701 Engineering instruction
0702 Information services
0703 Libraries
0704 Technical instruction
0705 Other (specify)

Electrical Equipment and Services

0800 This field generally
0801 Business and office equipment
0802 Components and accessories
0803 Controls
0804 Electrical services
0805 Household appliances
0806 Industrial electrical equipment (general)
0807 Instruments and test equipment
0808 Insulated conductors
0809 Lighting and wiring
0810 Magnetic devices
0811 Power generation
0812 Rural electrification
0813 Storage batteries
0814 Switchgear
0815 Telephone equipment
0816 Transformers
0817 Transmission and distribution
0818 Welding apparatus
0819 Other (specify)

(Also see Communications and Utilities fields)

Electronic Equipment and Services

0900 This field generally
0901 Antennas
0902 Audio
0903 Components and accessories
0904 Controls
0905 Electroacoustic transducers
0906 Electro-optical devices
0907 Electron tubes
0908 Electronic equipment generally
0909 Electronic services
0910 Instruments and test equipment
0911 Integrated circuits and components
0912 Lasers
0913 Microwave and radar
0914 Radio and TV receivers
0915 Radio and TV transmitters
0916 Recording
0917 Semiconductor devices

1103 Bearings
1104 Construction equipment
1105 Dies, jigs, and patterns
1106 Distilling equipment
1107 Farm machinery
1108 Food machinery
1109 Furnaces, heating equipment, ovens
1110 Gears
1112 Hydraulic machinery
1113 Industrial machinery and equipment (general)
1114 Internal combustion engines, (general)
1115 Machine tools and accessories
1116 Materials handling machinery
1117 Mining machinery
1118 Nuclear machinery
1119 Paper machinery
1120 Pneumatic equipment
1121 Power transmission equipment (mechanical)
1122 Printing and duplicating machinery
1123 Pumps and liquid handling equipment
1124 Refrigerating equipment
1125 Specialized industrial machinery
1126 Steam engines
1127 Textile machinery
1128 Turbines
1129 Vending and service machinery
1130 Other (specify)

Marine Transportation

1200 This field generally
1201 Boats and small craft
1202 Inland waterway craft and services
1203 Marine auxiliaries
1204 Marine engines
1205 Merchant ships
1206 Naval architectural services
1207 Naval vessels
1208 Ocean transportation
1209 Port facilities and services
1210 Propellers and shafting
1211 Shipbuilding and repair services
1213 Underwater craft
1214 Other (specify)

Medical and Health Services

1300 This field generally
1301 Artificial organs
1302 Medical and health care
1303 Medical and dental instruments
1304 Medical laboratory services
1305 Prosthetic devices
1306 Other (specify)

Metals, Basic (except Mining)

1400 This field generally
1401 Aluminum
1402 Copper
1403 Electrometallurgical products
1404 Foundries (general)
1405 Iron and steel mills, foundries, and forges
1406 Lead and zinc
1407 Metallurgical products (special)
1408 Metallurgical services
1409 Non-ferrous smelting, refining, and processing
1410 Non-ferrous castings
1411 Radioactive metals
1412 Rare metals
1413 Refractory metals
1414 Other (specify)

1702 Buses, trucks, and trailers
1703 Engines
1704 Motorcycles, etc.
1705 Motor transportation services
1706 Parts and accessories
1707 Other (specify)

Ordnance

1800 This field generally
1801 Ammunition
1802 Fire control equipment
1803 Guided missiles
1804 Guns
1805 Ordnance services
1806 Small arms
1807 Tanks
1808 Other (specify)

Petroleum

1900 This field generally
1901 Asphalt materials
1902 Crude petroleum
1903 Gas pipelines
1904 Liquified gas
1905 Lubricating oil and grease
1906 Natural gas
1907 Oilfield services
1908 Oil pipelines
1909 Refinery products
1910 Reservoirs (oil and gas)
1911 Other (specify)

Railway and Rapid Transit

2000 This field generally
2001 Railroad equipment
2002 Railroad transportation
2003 Railway services
2004 Rapid transit
2005 Other (Specify)

Utilities

2100 This field generally
2101 Electric utilities
2102 Electric and gas utilities (combination)
2103 Gas utilities
2104 Sanitary services
2105 Sewerage, waste disposal services
2106 Water supply and treatment
2107 Other (specify)

Other Products and Services

2201 Advertising and promotion
2202 Banking and finance
2203 Building maintenance
2204 Business forms
2205 Clothing
2206 Insurance
2207 Laboratory services
2208 Leather
2209 Lumber
2210 Paper
2211 Paper products
2212 Patents and legal services
2213 Personnel services
2214 Printing and related services
2215 Pulp
2216 Regulatory services
2217 Retail trade services
2218 Rubber and fabricated products
2219 Textiles and textile products
2220 Tires
2221 Toys and amusements
2222 Wholesale trade services
2223 Wood products
2224 Other product (specify)
2225 Other service (specify)

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List C. Areas of Technology and Science for Use with Questions 16 and 17.

The following is a list of areas of technology and science for use with questions 16 and 17. Please scan the entire list and select the appropriate number and area of technology or science which describes your specific professional competence.

001 Acoustics, sonics
002 Adaptive systems
003 Aerodynamics
004 Air pollution
005 Applied physics
006 Aquaculture
007 Arrangement
008 Assembly methods
009 Astrodynamics
010 Astronomy and astrophysics
011 Atmospheric sciences, meteorology
012 Automation, cybernetics
013 Beneficiation, ore processing
014 Biochemistry
015 Bioengineering
016 Biological applications
017 Biomechanics
018 Bionics, medical electronics
019 Casting
020 Chemical applications
021 Circuits, networks
022 Combustion, fuels
023 Communication
024 Computer applications
025 Concrete technology
026 Configuration control
027 Conservation, reclamation
028 Containerizing, packaging
029 Control (general)
030 Coating, plating, cladding
031 Corrosion
032 Cost engineering
033 Cryogenics
034 Crystals, crystallography
035 Data processing
036 Desalting
037 Dielectrics
038 Display
039 Drafting, drawing, graphic technology
040 Drainage, irrigation
041 Drilling
042 Drying
043 Earth sciences
044 Economics
045 Educational technology
046 Electrical applications
047 Electrical engineering
048 Electrochemistry
049 Electromagnetic radiation
050 Electromechanical technology
051 Electronic applications
052 Energy generation and conversion
053 Engineering
054 Environmental control
055 Environmental factors
056 Equipment facilities
057 Explosive effects
058 Fastening, joining

068 Geodesy
069 Geology
070 Geophysics
071 Guidance, stability
072 Health physics
073 Heat transfer
074 High pressure
075 High temperature
076 History (technological)
077 Holography
078 Human factors
079 Hydraulics
080 Hydrodynamics
081 Hydrography
082 Hydrology
083 Illumination, lighting
084 Industrial health
085 Industrial engineering
086 Information retrieval
087 Information theory
088 Infra-red, radiometry
089 Instrumentation
090 Insulation, electrical
091 Insulation, thermal
092 Kinetics
093 Life support
094 Logic
095 Lubrication
096 Magnetics, magnetism
097 Magnetohydrodynamics
098 Maintainability, maintenance
099 Manufacturing technology
100 Marine sciences
101 Mass transfer
102 Material applications
103 Material handling
104 Material properties
105 Mathematics
106 Measurement, metrology
108 Mechanical applications, applied mechanics
109 Mechanical engineering
110 Mechanics
111 Medical applications
112 Metallurgy (general)
113 Metallurgy, extractive
114 Metallurgy, physical
115 Metallurgy, powder
116 Metallurgy, process
117 Military applications
118 Miniaturization
119 Mining, surface
120 Mining, underground
121 Mining, underwater
122 Motion and time study
123 Navigation
124 Neural nets
125 Noise reduction
126 Nondestructive tests
127 Nuclear engineering

134 Photoelectricity
135 Photogrammetry
136 Photography
137 Physics
138 Physiology
139 Plant and facilities engineering
140 Plasmas
141 Pollution
142 Power, electrical
143 Power, mechanical
144 Power, nuclear
145 Preserving
146 Processes
147 Product engineering
148 Production methods
149 Production planning and control
150 Propulsion
151 Psychology
152 Public health
153 Public safety
154 Quality assurance
155 Quality control
156 Radiation safety
157 Radioactivity
158 Radio astronomy
159 Radio frequency compatibility
160 Radiography, x-rays
161 Recording
162 Refining
163 Reliability
164 Reprography
165 Rock mechanics
166 Safety engineering
167 Sanitary engineering
168 Servo-mechanisms
169 Size reduction
170 Soils
171 Solid state
172 Solid waste
173 Specifications, standards
174 Statistics
175 Stress analysis
176 Structures
177 Superconductivity
178 Surveying, mapping technology
179 Systems engineering
180 Telecommunications
181 Telemetry
182 Testing-environmental, operational
183 Testing-laboratory
184 Thermochemistry
185 Thermodynamics
186 Thermophysics
187 Tooling, tools
188 Traffic
189 Transportation
190 Ultrasonics
191 Underwater acoustics
192 Underwater technology
193 Vacuum technology

020 Chemical applications
021 Circuits, networks
022 Combustion, fuels
023 Communication
024 Computer applications
025 Concrete technology
026 Configuration control
027 Conservation, reclamation
028 Containerizing, packaging
029 Control (general)
030 Coating, plating, cladding
031 Corrosion
032 Cost engineering
033 Cryogenics
034 Crystals, crystallography
035 Data processing
036 Desalting
037 Dielectrics
038 Display
039 Drafting, drawing, graphic technology
040 Drainage, irrigation
041 Drilling
042 Drying
043 Earth sciences
044 Economics
045 Educational technology
046 Electrical applications
047 Electrical engineering
048 Electrochemistry
049 Electromagnetic radiation
050 Electromechanical technology
051 Electronic applications
052 Energy generation and conversion
053 Engineering
054 Environmental control
055 Environmental factors
056 Equipment facilities
057 Explosive effects
058 Fastening, joining
059 Filament technology
060 Fire prevention and protection
061 Fluid dynamics, fluid mechanics
062 Fluidics
063 Forming, shaping
064 Friction
065 Fuel cells
066 Gas dynamics
067 Geochemistry
087 Information theory
088 Infra-red, radiometry
089 Instrumentation
090 Insulation, electrical
091 Insulation, thermal
092 Kinetics
093 Life support
094 Logic
095 Lubrication
096 Magnetics, magnetism
097 Magnetohydrodynamics
098 Maintainability, maintenance
099 Manufacturing technology
100 Marine sciences
101 Mass transfer
102 Material applications
103 Material handling
104 Material properties
105 Mathematics
106 Measurement, metrology
108 Mechanical applications, applied mechanics
109 Mechanical engineering
110 Mechanics
111 Medical applications
112 Metallurgy (general)
113 Metallurgy, extractive
114 Metallurgy, physical
115 Metallurgy, powder
116 Metallurgy, process
117 Military applications
118 Miniaturization
119 Mining, surface
120 Mining, underground
121 Mining, underwater
122 Motion and time study
123 Navigation
124 Neural nets
125 Noise reduction
126 Nondestructive tests
127 Nuclear engineering
128 Nucleonics
129 Oceanography
130 Offshore operations
131 Operating procedures
132 Operations research, systems analysis
133 Optics
153 Public safety
154 Quality assurance
155 Quality control
156 Radiation safety
157 Radioactivity
158 Radio astronomy
159 Radio frequency compatibility
160 Radiography, x-rays
161 Recording
162 Refining
163 Reliability
164 Reprography
165 Rock mechanics
166 Safety engineering
167 Sanitary engineering
168 Servo-mechanisms
169 Size reduction
170 Soils
171 Solid state
172 Solid waste
173 Specifications, standards
174 Statistics
175 Stress analysis
176 Structures
177 Superconductivity
178 Surveying, mapping technology
179 Systems engineering
180 Telecommunications
181 Telemetry
182 Testing-environmental, operational
183 Testing-laboratory
184 Thermochemistry
185 Thermodynamics
186 Thermophysics
187 Tooling, tools
188 Traffic
189 Transportation
190 Ultrasonics
191 Underwater acoustics
192 Underwater technology
193 Vacuum technology
194 Value engineering
195 Waste disposal
196 Water pollution
197 Water resources and supply
198 Welding
199 Work methods and simplification
200 Other (specify)

List D. Functions for Use with Questions 16 and 17.

The following is a list of work functions for use with questions 16 and 17. Select from this list the appropriate number and function you perform or supervise.

01 Advising, consultation
02 Construction, installation
03 Coordination, liaison
04 Cost estimating, budgeting, procurement, purchasing
05 Design
06 Development
07 Drafting, drawing, graphics
08 Exploration
09 Information and data processing, or technical writing
10 Planning, directing
11 Production, operations, maintenance
12 Quality assurance and control, reliability
13 Research
14 Sales, technical services
15 Specifying
16 Teaching, instructing, training
17 Testing, evaluation, inspection
18 Other (specify)

List E. Supervisory Responsibility for Use with Question 16.

The following is a list of supervisory responsibilities for use in question 16. Select from this list the appropriate number and term for use with your employment profile.

1. No regular supervision given
2. Indirect or staff supervision
3. Supervision of team or unit
4. Supervision of project or section
5. Management of major department, division, or program
6. General management of organization

ENGINEERS JOINT COUNCIL

MEMBER SOCIETIES

American Society of Civil Engineers
American Institute of Mining, Metallurgical and Petroleum Engineers
American Society of Mechanical Engineers
American Society for Engineering Education
Society of Naval Architects and Marine Engineers
American Society for Testing and Materials
American Society of Agricultural Engineers
American Institute of Consulting Engineers
American Society for Metals
Society of Manufacturing Engineers
Society for Experimental Stress Analysis
Instrument Society of America
American Society for Quality Control
American Institute of Industrial Engineers
Society of Fire Protection Engineers
American Institute of Plant Engineers
American Association of Cost Engineers
Society of American Military Engineers

ASSOCIATE SOCIETIES

Air Pollution Control Association
National Institute of Ceramic Engineers
American Society for Nondestructive Testing
Society of Packaging and Handling Engineers
International Material Management Society
Society for Women Engineers
Society for the History of Technology
Western Society of Engineers
Michigan Engineering Society
Louisiana Engineering Society
North Carolina Society of Engineers
Washington Society of Engineers
Engineering Societies of New England
South Carolina Society of Engineers
Los Angeles Council of Engineers and Scientists
Hartford Engineers Club
International Material Management Society (New Jersey Chapter)
Cleveland Engineering Society

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